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# ATLANTA
# Medical and Surgical
# JOURNAL.

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**Pax et scientia, sed veritas sine timore.**

## VOLUME III.

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# ORIGINAL COMMUNICATIONS.

## ARTICLE I.

*Parisian Hospitals—their more striking features and advantages—suggestions to American Students of Medicine who may intend to prosecute their studies, in Paris, &c.* By THOMAS A. MEANS, M. D., Oxford, Georgia—now in France.

THE general administration of the Hospitals of Paris, is so little known in America, that I design to give, for the benefit of those either interested directly or indirectly, an abridged account of this system of "Public Assistance, its doings and its advantages, believing that some good may be derived from the details furnished, especially, by those whose intention it is to visit Paris, in the pursuit of Medical knowledge.

It has been my purpose, since my arrival, (8th October last,) to communicate something upon this subject, and for the purpose of securing correct information, I have paid marked attention, both in and out of the Hospitals. Personal observation, therefore, as well as private instruction from reliable quarters, have enabled me to gain much of interest, as well as value, relative to these peculiar and most interesting benevolent institutions. Under these circumstances, therefore, I venture to submit for insertion in your Journal, the following article, trusting that the facts which it reports, may not be without value to some, who may follow me to this trans-Atlantic seat of Medical learning.

The words Hospice and Hospital are, with us, often confounded, and are regarded as one and the same, but when rightly known and considered, deserve a separate classification. An Hospice is not un-like an English Alms-house; is created and endowed by private legacies or donations, and immediately under the control and direction of the *Counsel de Surveillance*, consisting of 20 members, appointed by the National Convention, over whom the prefects of the Seine and Police preside. They decide all measures administrative, and regulate their private funds, property, &c., &c. The majority of these institutions make certain requisitions, before an entrance can be effected, for the purpose of receiving medical attention; such as absolute poverty, decrepitude and orphanage, while but little is required from the less indigent, save the payment of a sum, regulated by the comfort and position of rooms, quality of linen, bedding, &c. Thus, moderate circumstances obtain moderate accommodations. I may also add, that, persons who are not diseased, and who are anxious to curtail their expenses, are admitted upon the payment of a certain sum *par jour*, they are allowed to remain *ad libitum*, or until their funds are exhausted. Thus, those whose income is exceedingly limited, save, during a twelve month, one half of the expense, that a life in a boarding house would absolutely require. Hospitals, as Hospices, are under the control of *l'administration Général de l'Assistance, Publique;* yet they do not limit the number of their inmates, nor regard their condition, moral or financial, nor their malady. There are two grand divisions of these institutions, the former, under the head of General or Public, and the latter, special or private, while both are considered *Assistance Publique*, without any *special* difference, save the requisitions for admittance as mentioned above. Civil Hospitals, too, may be classed under the same general head, yet more directly under the control of the Minister of the Interior. There is a *Bureau Central d'Administration*, consisting of twelve Physicians and six Surgeons, who relieve each other in the discharge of special duty. This body is empowered with exclusive privileges, rejecting or admitting any patient (after examination) they may see proper, and if the disease is worthy of attention, a card of admission is given, stating the nature of the malady, occupation, age and residence of the patient. This must be presented to the Director of the Hospital, who assigns the ward confined more particularly to the disease with which he may be affected.

The principal Surgeons or Physicians attached to each Hospital, may grant admission, in urgent cases, with the signature of the Director only, and to effect this end, morning consultations, Sunday excepted, are given at 10 o'clock, after the regular ward service, to which hundreds flock for advice, many with the simplest affections possible. Children, upon Thursday of each week, are vaccinated; to the parents of whom, a sum of two or three francs is given, and those not having undergone this operation, are excluded from all the public schools, within the confines of Paris, a precaution it would be well to establish in America, and thereby prevent that public panic which throws a whole community or town into confusion, even when the simplest varioloid makes its appearance.

The number of Hospitals, exclusive of Hospices, are, at present, 26, with an aggregate of 22,482 beds; ten to twelve thousand patients of all ages and sex, are admitted annually, out of which, 4,500 are constantly under treatment, or cure: while the number of Hospices are 14—4,044 beds; patients annually admitted, 4,400; 2,000 under treatment, and the mortality 1 in 19. The yearly expenses incurred by these, amount to not less than 12,000,000 francs, or, $2,400,000. From their property, consisting of lands, houses, funds, &c., &c., comes the revenues, including the tax levied upon Theatres, and other places of amusement, together with the annual contribution of the Government. All this is in itself insufficient to supply the funds disbursed, which deficit is made up from the Public Treasury, without an additional levy upon Theatres, etc. Besides the various *Hôpitaux des maladies actuelles*, there are many others termed *Sociétés des Charités*, among which I may mention *Société Medico Philanthropique;*

*Société National de Vaccine; Société Medical du Temple; Société Medical d'Accouchement; Maisons des Sœurs l'ardes Maladies*, etc.; &c. These give out-door employment to indigent families and blind persons, and gather up poor children for Christian education, Catholic or Protestant, besides teaching them a trade. They also contribute to the *Asile de la Providence*, an institution set apart for old persons, with a cost of 600 francs, each. The Minister of the Interior also pays out of the public fund 10,000 francs, annually, for its support. The most peculiar, as well as the most interesting of these Institutions, is that of the *Hospice des Infants Trouvers*, instituted by St. Vincent de Paule, between the year 30 and 34 of the 16th century; the peculiarities of which, consists in the singular, yet effective method, of receiving the foundlings. Upon the exterior of the building, there is a flanked buttress or tower: within this recess is suspended a large basket or box, called a "*tour*" attached to a rope which moves upon a pully, inside the building. A bell is also hung within, the chord of which reaches the ground without. Upon this being rung, the *tour* is turned and lowered by those within, to receive any child that may have been deposited in it, without attempting to ascertain the person or parent. There was a bill presented to the Legislature, for the suppression of this humane custom, but public opinion cried, "down with all opposition," and by an Imperial decree, issued in '54 it was withdrawn, and since then, it has been more generally adopted. It would not be amiss to state that, for two years, between the date of its origin, and the time when the bill for its suppression was introduced, its operation had been mainly discontinued. In consequence thereof, the number of infanticides, either before or after birth, were greatly augmented—in the ratio of 7 to 10, while in many localities, they were doubled and even trebled. The natural temerity and peculiar weakness of the sex, induced this crime of infanticide, from an innate dread of having their names exposed, by those ever ready to condemn their misfortunes. Thus driven to dispair, and oftentimes to madness, they put an end to the existence of the child, either before or after parturition, and thus escape public scandal.

By the means, however, of the *tours* mentioned, they are led to withhold from committing so heinous an act, and prompted by that maternal tenderness so characteristic of woman, induced, privately, to give into the hands of the charitable, the little one their misfortune had induced them to conceal.

The number of these institutions have considerably diminished since 1830, owing principally to the increase of *Maison's Publiques d'Accouchements,* to which the unfortunate females may repair without fear of public exposure, as well as receiving all necessary management and treatment during their child-bed state. . Many, no doubt, possessing less of care than affection, present their offspring, as subjects of charity, rather than undergo the trouble and difficulty of rearing and supporting them. There are other establishments designed to effect like purposes, in operation in some parts of France, termed *Colonies d'Agricultures,* supported principally by the inhabitants of the district, or department in which such an institution exists. The number of foundlings received in the *Hospice des Enfants trouvers,* annually amounts to 400, and the mortality 1 in 10. The *Administration de l'Assistance Publique,* with a philanthropic spirit, which is highly commendable, have, of late, it appears, extended their sphere of usefulness, and have accomplished much towards the education of foundlings, by introducing into their system of administration certain domestic instruction. Thus, boys, when at the age of 10 or 14, are bound apprentices to some trade, where they remain a term of years, regulated by their proficiency. They are, then, set at liberty, with a small donation. Girls are likewise received—a limited number, however—who are taught those useful branches of industry best adapted to their sphere in life. Foundling girls who have served their term of years, with a character unimpeached, receive, upon marrying, a sum of 100 francs, the counsel and advice of the institution, as well as their aid in forwarding arrangements for a decent and lawful "*noce.*"

*Hospice des Orphelins* is an institution, as its name imports, set apart for the protection and care of children who have neither relations nor guardians. These are, in the French sense, considered orphans, and alone entitled to the benefits of the institution. Besides, as an asylum for orphans, they have appended to their code of management, a clause granting certain privileges to poor families, who, upon falling sick, are allowed to place their offspring in the institution until they are themselves cured; and if they die, their children are properly cared for, taught the elementary branches, and placed out to learn a trade until 21 years of age, when they are returned to their relation or guardian who may claim them. Those under the age of 12, falling ill, are transferred to *Hôpital des Enfants Malades*, or the nearest Hospital within the arrondissement. Notwithstanding the immense number of hospitals, hospices, charitable institutions, and those confined to the treatment of special diseases, such as cutaneous, mental, &c., there is not one, nor so much as a ward, set apart for *diseases of the eye*, but the patients are scattered throughout the various "*salles*," thus placing them almost beyond the reach of him who seeks to gain information upon so important, and yet so much neglected branch of the profession. There are four eye clinics, gotten up by private enterprise, the most important of which are those of MM. Sichel and Desmarres. The former, although younger, and less experienced, has had, during the past winter and spring, a much larger class than the latter. This justly merited popularity has excited a spirit of jealousy on the part of Desmarres, who, hitherto, occupied a position almost isolated, and was held up as the Appollo among Occulists, and the profession generally.

Sichel is a man of rather unprepossessing manners, yet mild and patient in his devotedness to the interest of his class; has no bigotry, and urges, dogmatically, no opinions; nor is he inflated with that curse of human nature—self-pride.

Desmarres, possessed with a zeal and energy peculiar to the man, has worked his way to eminence, without opposition, and is still at the head of the profession, upon the diseases of this one organ. Yet, he, like most other *specialists*, *knows too* *much.* No credit is given his pupils for *their* knowledge, let them be ever so proficient or prompt in answering. He mocks and chuckles at the simplest blunder made, and should a correct answer be given, his vocabulary of objections would immediately supply words for an abruptly expressed, and directly opposite opinion. He takes great pride in contradicting the views of such men as Velpeau, Andral, Nelaton, Malgaigne, and others, before his class, while he quotes them with all due defference outside his clinic. This "*bonne estime de lui même*" has done him much injury, which is to be regretted, for, withal, he has thrown more light upon this one branch of the profession, perhaps, than any one who has preceded him. A student, in this department, by paying a sum of 30 francs, is entitled to a full course of two months, with the privilege of examining the patients for himself, until he is satisfied.

Most of the hospitals are on an immense scale, and some magnificent. I may mention Lariboisiére, as heading the list, completed in 1854. It contains 612 beds—ventilation most pertect—and is more in keeping, externally, with a Royal residence, than an asylum for the sick.

*St. Louis* is, perhaps, larger than any single hospital, and is devoted chiefly to cutaneous diseases, although urgent surgical cases and acute disorders are admitted. It was built by Henry IV., in 1602, and contains 858 beds; *La Charité, Hotel Dieu*, and *La Pitié*, containing, respectively, 494, 810, 624, beds, are also large and commodious. Ventilation, however, in the four last mentioned, seems to have been overlooked in their original construction and arrangement. Since '52, however, many valuable improvements and alterations have been made, both as regards proper ventilation and convenience. The utmost cleanliness prevails throughout the whole—due to the unceasing industry and vigilance of that praiseworthy sect called *Sœurs de Charité*, who devote their entire lives to the care of the sick, without the least remuneration. Many other Hospitals might be mentioned, as equally worthy of note, yet I will desist, as my article is, I fear, already too much extended. Each Hospital contains an amphitheatre—some two—

in which clinical lectures are given, gratuitously, from 9 to 10 o'clock each day, commencing in November, and ending in August. A simple ticket is all that is required for admittance, which may be obtained at the Bureau of the Hospital, upon the presentation of your Medical Diploma, or a certificate from a Professor. This requisition is not fully carried out, nor is one in fifty demanded of a student of medicine, save at *La Pitié*, and then it may be avoided.

The requisitions, before a student can receive the title of M. D., are strict and imperative.

He must be at least 18 years of age; must present the registration of his birth; a certificate from the civil authorities, of his unexceptional moral deportment—also one from his parent or guardian, announcing the step he has taken, together with his Diploma of Bachelor of Letters. He is moreover required to undergo, previous to his medical studies, a thorough examination in Greek, Latin, Rhetoric, History, Philosophy, Mathematics, and the Physical Sciences. To obtain the Diploma of Bachelor of Arts, he must be examined upon *Arithmetic*, *Geometry*, *Elementry Algebra*,—through simple equations, *Mechanics*, Elements of *Physics*, *Chemistry* and *Natural History*. After this thorough and impartial drilling, he must, before entering the medical *green room*, take what are termed subscriptions, 17 in number, for fifteen of which, he must pay 750 francs, (50 each), the 16th 35 francs; a thesis, diploma and seal, 165 francs, together with 130 francs, for the 7th, 9th, 10th, 11th and 12th inscription. The remaining eleven are not exacted; thus making a sum total of 1,100 francs, or $220.

There is an examination called *examin de fin d'année* which takes place at the expiration of the fourth year, while the *examin de doctorat* is passed, after the last payment for an inscription has been made. The studies required from a foreign student are similar to those of the secondary schools of France, and when presenting himself for examination, the elementary or secondary branches, such as Philosophy, Rhetoric, Mathematics, &c., are passed by, under the supposition that he has fully studied and prepared himself in other Universities. His

Diploma must be presented as a certificate, before an inscription, in exchange, will be granted him. The absolute and necessary expenses are the same as those of a regular French student, save the payment of 100 francs, each, for a thesis, seal, and Diploma, together with 100 francs for six "*certificates d'aptitude.*" There are three members of the Faculty appointed by the President, to conduct these examinations, the final of which, are entirely practical, and are examined at the bedside, save that of Midwifery. Two, four or six cases, as they may think proper, are selected, upon which the applicant is required to give the prognosis, diagnosis, and treatment. Those preceding upon Anatomy, are conducted over the dead body: thus, for instance, an arm, leg, or any other member is selected, who is required to dissect it in presence of the tribunal; give the particular and relative position of bones, muscles, nerves, vessels, &c. The remaining subjects, upon which he is to be examined, are drawn from an urn, so that he has no knowledge of what is to come. This is doubtless done to prevent a student from adopting any one disease, as a *speciality*, in the commencement of his medical studies. He is therefore compelled to know *well* every branch contained in the catalogue of Medical studies. His thesis must be written and printed in French, and an open defence of the views set forth therein, must be given in presence of those constituted his judges. Before taking finally the degree of M. D., he must have served the last twelve months of his course in an Hospital. Thus, briefly, are the requisitions before the title of "Doctor of Medicine" can be granted to any applicant by the French Schools. It is an ordeal, yet not so frightful as might be supposed, for many who are passed, are led by favor or preferment, answer more promptly or assume an air of confidence that wins upon the professors, while he who is less fluent, less gassy, or less prompt in answering, is turned aside, although intrinsically more deserving than his successful opponent. Thus, withal, their *réglées obligatoires*, the French Schools are not without objections. Impudence and ready speech, even in our Republic, often elevate one far beyond his actual merit —while he, whose mind as well as tongue, has to be flogged into activity, sinks infinitely lower after his *coup d'essai*, than before.

The *Faculté de Médicine* is a body of 26 professors appointed by Government, with fixed salaries, ranging from 7,500 to 10,000 francs. A Dean is also appointed for the term of five years, whose duties are not unlike those of the Dean's office in America, save in the exercise of a more absolute power: such as convoking the Faculty and suspending its action, or any Course of Lectures he may see proper.

There are also 24 "*agrégés*," chosen by competition, and are nothing more than Vice Professors. They are privileged to Lecture, conduct a chemical service, or follow the wards, in absence of the regular Professor. I give, as a note of reference, a list of the Professorships and their names attached: *Anatomy*, Denonvilliers; *Pathological Anatomy*, Chruveillier; *Physiology*, Bérard; *Surgical Pathology*, Cloquet; *General Pathology* and *Therapeutics*, Andral; *Therapeutics* and *Materia Medica*, Grisolle; *Medical Jurisprudence*, Adelon; *Hygienic Medicin*, Bouchardat; *Phamacy*, Soubeiran; *Organic Chemistry*, Wurtz; *Medical Natiiral Philosophy*, Gaverret; *Medical Natural History*, Moquin Tandon; *Clinical Surgery*, Velpeau, Nélaton, Jobert, and Becquerel; *Operations* and *Bandages*, Malgaigue; *Clinical Medicin*, Peorry, Bouillaud Rostan, and Trousseau; *Clinical Obstetrics*, Paul Dubois; *Obstetrics* and *Diseases* of *Females* and *Children*, Moreau; *Medical Pathology*, Duméril. This body regulates all matters pertaining to Medicine. They exercise absolute power, and are only under the control of the Government. Every position, from Interne to Professor, is determined by what are termed *concours*, or test of scholarship; and should any vacancy occur, it must be filled by him who has but succeeded in his concour, not because he may have served a term of even three score and ten years as an Interne, Externe, or Agregé, nor yet by preference, nor reputation. This system of concours is made the test then, and in some respects a rigorous one. There are certain preferences, however, allowed him who has numbered his twentieth or twenty-first year as professor in an Hospital, yet should he seek another, left vacant, either by death or resignation, he must gain his position through the *urne de scrutin*, and not by concours. Among the more prominent features in the medical schools of Paris, are the advantages in a financial point of view, an item not inconsiderable. Here a student may prosecute his medical studies for any number of years, without the cost of two francs, unless he intends graduating, and then a sum of $240 only is required. Six years is the period fixed for a full course, including two years of preliminary study, commencing with the medical alphabet and ending with a printed thesis, the smiles of the Medical Board, a Seal and Diploma. Everything is free of access. Lectures are given in the *ecole Pratique* and School of Medicine, commencing at 9 o'clock, A. M., and closing at 6 o'clock, P. M., from the first of November to the first of August. Gratuitous lectures are also given upon various medical subjects throughout the *quatrier Latin*. Dissections are not allowed, either at *ecole Pratique* or *Clamart*, the only two general dissecting rooms in the city, during the summer months; yet, courses upon Operative Surgery are permitted after a special permit has been granted the demonstrator by the *Counceil de Surveillance*.

The student, leaving America for the Paris schools, should first have obtained his diploma, (medical), and a *knowledge of the French language*, a partial knowledge *at least*; for while the *former*, acting as a passport, serves to render his position, as a physician, easy and unembarrassed, the *latter* supports his confidence and protects him from impositions. His diploma is often demanded of him. Should he fall sick and have occasion to purchase drugs of a Pharmaceutist, not one ounce can he obtain without first presenting either his diploma or a certificate from a practising physician.

The greatest drawback, however, to an English or American student, is the language, a most important consideration, and one I fear that is too much neglected. If, before reaching France, he should have gained so much as the elementary principles only, that in itself would be of inestimable value to him. By following from the day of his arrival the Clinical lectures, beside instructions and examinations, for himself, of the patients, he will have gained, before the first five months, much of value to him—information that one or two years' study in America could not give. Occasionally, a young man who has chosen Paris for a home for at least a twelve month, is impressed with the belief that he can master the language in from two to four months. To effect this, he shuts himself up, pours over his French exercises with an assiduity truly fatiguing, seldom enters an Hospital, unless for recreation, but believes, by this mechanical course of study, he will have gained the key, the oil, and the *air* of a native Frenchman, by the wane of the first moon. This assumption, provoked by self-confidence, leads him to suppose that not one expression falls from the lips of Professors or patients, that he cannot fully interpret—*mot a mot.* This is altogether a false impression, and one that instead of advancing his interest either in a medical or social point of view, throws him back in the scale of advancement, besides robbing him of his most valuable moments—moments that might have been profitably spent in a free intercourse with the masses. Some *few* there are, I will admit, who gain a sufficient knowledge within the space of three months to *understand* with tolerable facility, but who, when attempting to *speak*, make most hideous blunders, more especially in the construction and disposition of the partitive articles and prepositions. Let five months pass, and he will tell you he knows less of the language he supposed he knew than in the first two weeks or ten days. I do not intend this to discourage others from coming here, but merely to put them upon the *qui vive*, and above all to urge the necessity of studying the language at home. I would deferentially advise, also, that a student should, by all means, bring his English works, at least upon Surgery, Physiology, Obstetrics and Practice of Medicine, for he will find them invaluable aids, especially during the early part of his medical course. After he has learned to read with facility, he can consult those of French authors. While noticing the difficulties that one must necessarily encounter, I must not omit that of *living*, taken in an American sense. Everything from the most ordinary *necessities* to the smallest luxuries, are exorbitantly high, and in scarcely one article is there an exception to the remark. You will be told, doubtless, the contrary, but you should prepare yourselves with a *surplus* for emergencies, let the dream of ease, comfort, good-living, &c., be what it may. *Books*, (unbound,) *gloves*, and *wine* are about the only cheap articles of merchandise. Notwithstanding these inconveniences, a life among the Hospitals is a plesant though laborious one.

Withal, France stands *first* in Medicine and Surgery; its Hospital system bette rregulated; its requisitious for graduation more severe, and its board of instruction, coupled with an insatiable thirst for medical investigation, places her far beyond any other country. England, I fear, has some national characteristics which must ever act as drawbacks upon her success in attempting to rival her sister across the channel. She has, it is true, turned out many distinguished men in the profession, and has done much towards the advancement of medicine, but by whom? Men of poverty and low birth? Rarely ever but by men claiming to be the descendants of Lords or Duchesses; thus, if one drop of royal *sang* can be detected in his genealogy, he is at once favored and promoted. Lineage, not worth or merit, are the requisites for promotion or advancement. There is one feature in the French schools I would wish to see adopted in those of America; that is, the absence of all applause, filth, tobacco juice, disorder, and an excess of wine. The most profound silence in the wards and amphitheatres is observed, almost to a fault. What an opposite state of things exists in a majority of our schools, North and South. Repeated applause is tolerated, if not approved. A spirit of restlessness too often manifests itself, with a censurable inattention to the valuable instructions of the worthy professor, who is sometimes compelled to lecture while a portion of his class are either taking a private game at cards, satisfying the inner man with a mess of pea-nuts, and strewing the hulls about the floor, or it may be, indulging in a quiet slumber; and yet, we would not turn *censor morum*, and criticise the habits of our compeers in the honored land of our common nativity. No! no! while we would gladly see American students surpassed by none on earth, and would gladly hail any rational improvement, we are too young to censure, and have no taste for the work. Facts and opinions then, have been frankly, perhaps too frankly, given, but should the hasty and unsystematised suggestions here furnished, aid any of my beloved young countrymen in their attempts to prosecute their medical studies abroad, and especially in the great French capital, I shall be amply compensated for supplying these details.

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## ARTICLE II.

*Something "new under the Sun!" Negro Testimony* vs. *the Science of Medicine! A learned Professor of Medicine introducing an old African Slave to his Medical Class for the purpose of eliciting his Experience and Opinion in the settlement of a controverted physiological question.* By J. Boring, M. D., Professor of Obstetrics in the Atlanta Medical College.

My attention has recently been called to an editorial notice in the *Nashville Journal of Medicine and Surgery*, for August, 1857, of the Lecture delivered by me, on the subject of the "Use and Abuse of Tobacco," at the opening of the present course of Lectures in the "Atlanta Medical College," in which, while the writer shrinks from being understood as "defending the use of Tobacco," or as being the apologist of those who do use it," he *disingenuously seeks* to cast opprobrium upon the Lecture, and parry its force, by reference to a former discussion, in which he *had* taken the very position here disclaimed, and in the defence of which he had introduced to his Medical Class an old African slave, for the purpose of invoking his experience and *opinion*.

He tells us, that having introduced "Old George," who was then "ninety-seven years of age, he asked him, 'What a man ought to do, and live on, to attain his great age, and yet be hale and strong.'" Interesting teacher and pupil!—The old teacher answered, "he ought to eat plenty of bacon, corn bread, and cabbage, and work from Monday morning until Saturday night in the open field." The student then asked his sable teacher,—

"Do you drink any sort of spirits?"

*George*—"Not much—never did drink much; never drunk."

"Do you use tobacco?"

*George*—"Yes Sir."

"How do you use it?"

*George*—"Smoking it in pipe and chewing it."

"Do you use much?"

*George*—"Always smoking or chewing, except when eating."

"What! not when you are sleeping?"

*George*—"No! I don't *chew* it while I sleep, but it is *there* in my mouth, ready for me when I wake. I always go to sleep with tobacco in my mouth."

"How long have you used tobacco?"

*George*—"About *ninety years.*"

"You have a wife?"

*George*—"Yes, I have my seventh wife now."

"How many children have you had?"

*George*—"I don't know how many I have buried, but a great many. I have only *thirty-seven* living."

Here the instructions concluded, the pupil, evidently being well instructed, and satisfied with his attainments. The impressions of this *African eloquence* seem, indeed, indelibly written, and singularly influential even to the present moment. But are we to understand that the chewing and smoking tobacco, the number of wives *enjoyed*, or the numerous children begotten, or the *whole*, together with bacon, corn-bread and cabbage, and hard work, furnish the means of attaining so great an age with vigor, such as George developed? I suppose the whole are to be taken into the account, especially the large number of wives, or *women*, to whom the *old man had* enjoyed access, and the remarkable proficiency developed of begetting children, since they are so particularly enumerated, and some of them italicised by the (then) student, now *learned* *professor*, and that he who would share like blessings with "good old George," must adopt *his means* for their "attainment." Is the proposition adopted? Having been denied the advantages of *such* instructions, I cannot venture on the one hand to adopt the doctrines; nor, on the other, an attempt to answer the *arguments* by which they are so forcibly inculcated. I surrender the point without discussion. It is absolutely inapproachable.

This, however, is by no means the first instance in which I have been *routed* by unanswerable arguments of *the kind.*

A short time since, while engaged in a case of midwifery, in the country, the placenta being extracted, a company of wise-looking old matrons demanded that it should be burned, affirming from "experience," that unless this was done the patient would "flood." The *argument* was resistless, I *surrendered*, and forthwith pitched the after-birth into the fire.—While it was broiling and hissing on the coals, one of the company, an *expert* in the "third degree" of *self-importance*, said to me, "Doctor, do you know *jist* what will stop flooden?" I was "stumped," and asked her if *she* knew of such a remedy. "Well," she said, "let the woman swallow *jist two draps* of the blood in that ar cord, and thar's an eend o' flooden." It was too much. I was vanquished, and yielded the field.

## ARTICLE III.

### *A Case of Menorrhagia and Treatment.* By E. C. Moyer, M. D., of Talbotton, Geo.

Mrs. S—, aged 43 years; nervo-bilious temperament; the mother of two children, who died in infancy, consulted me in August, 1855, in reference to her alarming condition. She was suffering from great exhaustion, from excessive Menorrhagic discharge. I found her in the following condition: Excessive nausea, pain in the head, cold extremities, loaded tongue, constipated bowels, pulse 130 per minute, accompanied with disgust for all kinds of aliment, and an inability to retain anything taken per oris. The bowels were opened by enemeta. I ordered Opium, grs. iij; Acetate Plumbi, grs. xij; Calomel, grs. vj, divided into six pills, one to be given every two hours; mustard plaster to the epi-gastrium. The use of the pills increased the already deathly nausea to such an extent as to require their discontinuance; ordered acid sulph. Aromatic, 20 drops, in a half wine glass sweetened water, every two hours. The stomach, after tolerating a few doses, rejected it, though given in combination with infusion of rose leaves, and in every form that it could be administered. Although the frequent application of mustard plasters and turpentine poultices were made, and finally a large blister to the epigastrium, it in no degree lessened the nausea. I then ordered the following mixture: Saturated Tr. Opii, ℥i; Acid Nitric pure, ℥i; Fiat Mist, 10 drops in half wine glass of the infusion of roses, every five hours; the nausea became instantly relieved, and the hemorrhage rapidly declined, and Mrs. S— soon regained her wonted health and vigor.

On the 13th day of August, one year from the menorrhagic attack just referred to, I was called in great haste to see Mrs. S—, who, on my arrival, informed me that she had been flooding sixteen days, not profusely, until within the last few hours. I found the menorrhagic discharge to be very great. She was exceedingly pale, extremities cold, pulse 140 per minute, bowels constipated, tongue heavily coated, and dreadful nausea. I gave ten grs. Blue Mass, followed in four hours with an active dose of Sulphate of Magnesia, acidulated with Sulph, Acid, and its action promoted by enemas of cold water, which in some slight degree relieved the nausea, which, however, soon returned in all its former severity and urgency. A large blister to the epigastrium afforded no relief from her suffering; the Nitric Acid and Tr. Opii were given as in a former attack, Aromatic Sulph. Acid, Acetate Plumbi and Opii, Ergot in Tr. in powder and in infusion, alum and rose water, pulv. Kino Alum, Tannin and Opium, each in their turn were given, without the least relief to the nausea, or in arresting the menorrhagic discharge. Injections per vaginum and per annum with ice cold water were made every two or three hours. Injections per vaginum of Alum water, sol. Acetate Lead, Tanic Acid and Kreasote, Acetate of Zinc, sulphate of Zinc, tincture of the Sesquichloride of Iron, 2 drms. to 6 oz. water, each in their turn, were thoroughly used without in the least checking the hemorrhage. At this stage of the disease and sufferings of my patient, I found her greatly exhausted, almost ex-sanguine, unable to retain anything taken per oris, except dram doses of McMinn's Elixir of Opium. On the 9th day of my attendance, and 25th day of the hemorrhage, I found the womb to be greatly enlarged, *four times its natural size.* A vaginal examination with the speculum uteri, revealed an ulcer, involving the entire ostince, the size of an half dollar, bleeding profusely. I applied a stick of the Nitrate of Silver to the whole ulcerated surface, which only partially arrested the hemorrhage for a few hours. I cauterized the ulcer several times with a solution of the Nitrate of Silver, 10 grs. to the ounce, with no better effect. I applied the Acid Nitrate of Mercury for several days; the ulcer did not improve in the least under its use. Hemorrhage continued unabated; Tannin and Kreasote, the Sulphate and Acetate of Zinc were each in their turn used, with but little if any benefit. I then used tinct. Ferri, Chloridi, drops ij to 4 oz. water, and the hemorrhage was instantly arrested as if by magic. The ulcer soon assumed a healthy appearance, and under the daily use of the black wash, rapidly healed. The nausea disappeared, together with disgust for food. A generous diet was prescribed, and the following Tonic Aperient: ℞—Infusion of Gentian, ℥viij; Infusion Rose Leaves, ℥viij; Sulphate Magnesia, ℥j; Sulphate Ferri, grs. xxx; Acid Sulph. Dilute, ʒij; Fiat. Mist, wine glass full, three times daily. Occasionally a pill of Blue Mass, Ext. Hyosciam and Lupuline was given, in order to keep up the action on the liver. Under the above treatment Mrs. S— rapidly recovered her usual health, strength and spirits, having been confined to her bed fifty days, requiring nineteentwentieths of the time the constant attention of her physician.

On the 2d day of last March, seven months from the last attack, I was again summoned in haste to see Mrs. S—. On my arrival, I found her suffering from a recurrence of another more severe attack of Menorrhagia, all the former symptoms greatly aggravated, with the addition of a pain in the right hypochondrium and right shoulder, unable to lie on the left side, suffering from dreadful nausea and fear of immediate dissolution; liver greatly engorged and torpid, spleen much enlarged. An examination per vaginum, with the speculum uteri, revealed a perfectly sound uteri, and a profuse hemorrhagic discharge from the uterine cavity; the womb was slightly enlarged and anteverted. In order to arouse the liver to action, and as far as possible to disengorge it, I gave ten grains of calomel with Ext. Hyosciamus and Lupulin, followed in four hours with a full dose of Sulphate of Magnesia, acidulated with a few drops of Sulphuric Acid, the operation of the bowels being aided by repeated enemas of cold water. After the bowels were fully unloaded, I gave 60 drops of McMinn's Elixer of Opium, the only form of opium which the stomach would or could tolerate; indeed, the stomach would instantly eject every kind of aliment and medicine. I, as in the previous attack, applied mustard plasters, turpentine poultices, and a large blister to the epigastrium, with no relief to the constant, distressing and urgent nausea, in consequence of which, I was under the necessity of abandoning the administration of every remedial agent per oris, except an occasional dose of McMinn's Elixer of Opium. I used injections of ice cold water every three or four hours per anum; I kept the vaginal canal constantly packed tight, with my favorite Tampon (tow) either dry or saturated with one or the other of the following astringent lotions: Acetate Plumbi, Acetate or Sulphate of Zinc, Sulphate of Alum; Tannin and Kreasote and the tinct. Ferri Chloride, 4 drms. to 8 oz. water. I also kept the uterine orifice constantly plugged with tow. Her hips were elevated, room cool and dark, and the most perfect quietude enjoined; yet, with all the above precautions, day after day, and night after night passed, each day and night finding my patient no better, but gradually growing worse, until the sixteenth day of my constant bedside attendance was reached, my patient no better, but infinitely growing worse, in the most imminent danger, prostrated from irritation, and the long and unchecked hemorrhagic discharge, almost articulo mortis. In this alarming state of things what was I to do? Every effort heretofore had been unavailing, perfectly abortive. In this extremity, I felt that I had one more resource left. I resolved to try it, although its use might be attended with fatal consequences, yet I felt that the end justified the means, viz: to inject the cavity of the womb with the Nitrate of Silver. Having no suitable instrument, I passed a male silver catheter through four inches of a No. 10 gum elastic catheter, leaving two inches above the end of the silver catheter, into which I inserted the point of a two inch glass syringe, charged with a solution of the Nitrate of Silver, 10 grs. to the ounce of water. I injected with much force into the uterine cavity, its contents; and to my inexpressible delight, as by magic, the hemorrhage was instantly arrested. The injection caused much nausea and pain, which was soon relieved by 100 drops McMunn's Elixir of Opium. There was a slight return of the hemorrhage, the next day. I repeated the injection; Mrs. S. experienced but trifling pain, no nausea; the hemorrhage ceased, together with the nausea, neither afterwards returned. I continued the mercurial preparation with ext. Hyosciamus and Lupuline every third or fourth night, followed in the morning with a good dose of Sulphate Magnesia, acidulated with Sulphuric Acid. In conjunction with the following Tonic Aperient, ℞ Infusion Genitian, ℥viiss; Infusion Roses, ℥viiss; Syrup Rhacadas, ℥i; Sulphas Ferri grains, Magnesia Sulphas, ʒi; Acid Sulph. Dilute, ʒii; Fiat Mist, Dose, a wine glass full, three times a day, aided by a generous diet. Mrs. S. Rapidly regained her former health and vivacity. And although she has menstruated regularly, she has suffered no return of the hemorrhagic symptoms, and to-day, 12th August, 1857, she is in the enjoyment of better health and spirits, than for the last 25 years.

I regard the hemorrhagic attacks, in the cases referred to, as purely cases of passive Menorrhagia, modified by the condition of the stomach, liver, and uterus. The stomach in an highly irritable condition, (sympathetically affected,) the liver torpid and greatly engorged, and the womb slighly enlarged and anteverted. Indeed, I conceive that the large majority of the cases of menorrhagia are of the passive kind; if not so primarily, they become so secondarily, from the force of circumstances. In addition to the above plan of treatment, I would suggest the free use of acidulated drinks, mustard plaster, or blister between the shoulders, cold hip bath, where the patient is able to take it, or the cold spunging the entire body every morning, and after wiping the person entirely dry, friction to be freely made with a salt towel, and a most generous diet. In concluding this report, I must enter my protest against the too free use of astringents, per vaginum; in most cases I believe them worse than useless; from long experience, especially in the case of Mrs. S., I am convinced that astringent lotions injected into the vaginal cavity create an irritation in the neck of the womb and vagina, and act injuriously upon the principle of "ubi irritatio ibi fluxus."

## ARTICLE IV.

*Chloroform* By J. S. Weatherly, M. D., of Montgomery, Ala.

No remedy in the Materia Medica, I opine, is more potent for good, if properly used, than Chloroform ; and yet, it seems to be distrusted, and to be entirely discarded by a large number of the profession. They say that its use is fraught with danger. So it is, and so is the indiscriminate use of any powerful remedy. Suppose the ghosts of all those dead from the abuse of opium, mercury, &c., were arrayed in solemn order, and made to pass before the vision of our profession! Methinks the line of Banquo's ghosts would be small in comparison to the long line that would shake their bony fingers in solemn warning to the young Galens of our profession; to beware of these potent remedies. And yet, I presume it would take more than the eloquence of a Weller, sr., to his son Samivel, "to beware of the vidders," added to the testimony of ghosts, to induce us to lay aside these powerful and excellent remedies. Who would be willing to see his patient writhing in pain from spasm of the colon, and not give him opium, for the reason that it is a powerful remedy and must not be tampered with? We want powerful remedies to fight disease with. It would be foolish to try to extinguish a fire by blowing at it with our breath, when we know that water is its natural antagonistic force, and is sure to subdue it if used in sufficient quantities. Yet, some will look on a poor woman going into convulsions, from an irritable os uteri, and never use the only remedy that offers the greatest certainty of relief.

Let us digress a little, and consider for a few moments the terror of the lying in chamber. A delicate, nervous woman, after suffering a continually exciting, or more properly, an exhausting influence, upon her nervous system for nine months, arrives at the proper period for her confinement. The os uteri commences to dilate, pain comes on, every nerve is quivering with excitement. The influence is carried to the brain and spinal marrow. The machine is already out of order from over-work. The natural smooth flowing nervous current is disturbed, and the woman is thrown into convulsions. Just as we have convulsions from nervous exhaustion after bleeding, or from any other cause which detracts the natural stimulus from the brain. The physician is sent for; it is a case of puerperal convulsions. His mind reverts back to the ponderous tomes in his library, the great authors from whom he has been drinking in medical lore, and who from their misty heights have been shining upon and illuminating his pathway of darkness. He is lost in thought for a moment, and a moment only. Perhaps he is thinking of the awful responsibility of his position. Life! human life! is depending on him; he is thus to battle with death itself. Well may he think. Ah! he has it now; the *books* say bleed for convulsions, and he bleeds. For what? Because the books say so, and he wants his patient to die according to authority. What is the consequence? The bleeding exhausts still more the brain and nervous system, renders them still more susceptible, and the convulsions increase. Another bleeding, and more convulsions. The woman dies, from what? The convulsions or the bleeding. Suppose now (as I have had occasion to do in some five or six cases,) a handkerchief moistened with chloroform is applied to the nose; the woman breathes; those irritable, worn-out nerves quiet down; she sleeps gently and quietly—"sleep that sometimes shuts up sorrow's eyes"—brings rest to the nervous system, and "affords the only boon the wretched mind can feel." The influence of the chloroform is carried to every part of the system; the rigid os uteri dilates, and by a little careful manipulation the patient is delivered of a plump crying babe. All is well now; the patient and friends gratified, and the physician feeling as if he had been the means of saving life. Again: I have seen patients (lying in) who were worn out by irregular and spasmodic pains, where no progress was being made towards delivery, and the patient gradually sinking from nervous exhaustion. They were placed under the influence of chloroform, and as if by magic, the pains would become expulsive, and the woman be delivered quickly and safely. This is no fancy sketch. I am satisfied from experience that we have no remedy so sure of controlling convulsive diseases, especially in females and children, as chloroform. I, of course, do not advocate its indiscriminate use. There are cases where it would not be proper to use it, and others where it comes in merely as an adjunct. If convulsions are dependent on inflammation, of course use remedies for subduing it; but in nine cases out of ten, especially in puerperal convulsions, there is anything else except inflammation. The nervous system is exhausted from continued excitement. You wish to rest it; for you know by that means it will be invigorated and resume its natural actions. And among all the remedies for procuring this rest, quickly and speedily, none are equal to chloroform. I intended to enumerate other forms of disease, for which I have used chloroform, but have not the time at present.

## ARTICLE V.

*On the use of Belladonna, in arresting the secretion of milk.* By J. H. Connally, M. D. Barnesville, Georgia, April 10th, 1857.

Allow me, through the columns of your Journal, to relate the following case illustrative of the effect of Belladonna, in arresting the secretion of milk. I noticed in one of the back numbers of the Southern Medical and Surgical Journal, where two cases had been treated successfully with that Medicine.

When first it met my eye, I did not think much upon the subject; but since then I have had occasion to try the remedy in the following case: I was called a few days since, to a servant belonging to Mrs. ——, who had been delivered of twins, some days previous to that time. The "little ones" lived only a few moments after birth. On examination of the mother, I found the breasts very much enlarged, knotty and quite tender; pulse full and bounding; stomach nauseated, with considerable headache. I gave her some Medicine to tranquilize the action of the heart, and then applied the breast pump; but it was so very painful, and the lactiferous ducts were so completely obstructed with what the patient termed "curdled milk," that I was compelled to abandon it. I then ordered v. grains of Belladonna to be dissolved in ʒi of warm water, and applied to the areola. This was done twice during the night, with considerable relief to the patient.

On my visit, the next evening, I found that the tumefication, with all unpleasant symptoms, had entirely disappeared, and the patient declared herself quite well. I did not perceive any ill effects from the use of this medicine. The lochia flowed regularly on, and ceased at the regular time, with subsidence of all unhealthy action. If this proves as effectual in the future, as it has in some few cases that have been related, it is, certainly, a great discovery, and worthy the notice of every Physician.

# SELECTIONS.

## *Sudden Deaths in the Puerperal state, from Dynamic Lesions of the Nervous Centers, etc.* Translated by the Editors, from *L'Union Medicale de la Gironde de Bordeaux.*

[CONCLUDED.]

3d. *Lively Moral Impressions.*—Some observations of sudden death in the puerperal state have been attributed to a lively moral impression. Although the circumstances in which they have occurred have been obscure, we must not pass them by in silence, and we will still see that the nervous system is the chief moving cause. Under the influence of pregnancy, the affective and intellectual faculties of the woman are modified, and present a thousand and one aspects; the least emotion, a lively moral impression, makes its report throughout the whole economy. This modification, which supervenes in the nervous system of the woman who has conceived, is such that it exalts her sensibility and renders her more susceptible to the action of physical and moral causes. The work of Mr. Mac Clintock contains two examples of sudden death in consequence of this lively moral emotion. "In a great number of cases," says he, "in which a state of collapse and prostration shows itself, the patients had presented, sometime formerly, a particular moral state, a kind of fatal presentiment, which contributed to this fatal termination." That a long preoccupation of the mind by a dominant idea, must exercise a marked depressive influence on the vital energy, is a fact known by all physicians, and of which we might cite a great number of examples.

"I am convinced of this fact," says Ramsbotham, that the existence of constant despair during the latter period of the pregnancy has a most marked influence in diminishing the happy effects of those powers, by virtue of which are completed the necessary changes which follow labor."

Travers goes so far as to admit that, among the women recently delivered we observe cases which certainly demonstrate the grievous influence of this depressing cause, and in support of which, he reports two facts, of which I cite only the following:

Observation 12th. A young lady, happily married, impressed, probably, by some sorrowful and unexpected accident supervening in the circle of her friends, had manifested, from the commencement of her pregnancy, a fear of dying in her *accouchement*, and although there was no ground for this belief, her fears increased, so as greatly to alarm her relations and friends. She was delivered by a very careful and experienced physician, who was related to her. The labor was easy and natural in all respects; it was not accompanied by any unfavorable circumstance; the infant was dead-born, incompletely developed. The mother died suddenly, six hours after delivery. The body was examined, and did not present any trace of lesion.—*Union Medicale,* 1853.

In the puerperal state, the imagination of the woman is more excitable, more disposed to be alarmed; her morals and sentiments receive profound and particular modifications.

These disorders of the moral and affective faculties are very pronounced, and they are as much more so as the education, mode of life, and organization have impressed on her a greater excitability.

How many women, who, under the influence of pregnancy, and even after delivery, are a prey to distressing dreams, spasms, sadness, spleen, melancholy, and to a state of moral excitability difficult to calm? It is sufficient, in this state of puerperal susceptibility, to have a light occasional cause, the least emotion of joy or pain, to produce the gravest consequences in a very short time. Such is the case cited by M. Dehous, which was communicated to him by M. Nelaton.

Observation 13th. Fifteen days after a natural *accouchement*, a young lady from pure precaution, continued to keep her bed. Her father came to see her, and talked some time with her; she was very well. The nurse went to the door with the father, and when she returned to the bedside of the lady she found her dead. There was no autopsy.

Here is another fact of the same kind, communicated to me lately by Dr. Charmois, of the department of Bayou:

Observation 14th. On the 15th October, '56, I was called to the house of Capt. M. G. to observe the death of his wife, who had died suddenly. This lady, aged 34 years, had an excellent constitution. Delivered twelve days previously, very happily, the lochia had been abundant. She had not experienced any accident. This lady was of a very great sensibility; to such a degree that one day, from a simple contrariety, while she had her menses, they were arrested and did not return for six months. She received a letter from her husband, who had been absent from the beginning of her pregnancy, in which he announced his arrival on this day. She was greatly excited. At nine A. M., she received him without manifesting very great joy; she conversed all day with him. About seven P. M. was placed in another bed, and suddenly fainted and died. All means usually employed were useless. I arrived two hours afterward to look on a dead body. She was fat, and her face did not show any traces of suffering.

In presence of all these observations, so full of interest, can we not ask, if some of these cases of death, not yet explained, and that we have not wished to relate, for fear of making our paper too long, are not due to one of these lively moral emotions? There are, we know, some obscure facts, whose explanation seems to belong as much to psychology as to physiology, in which the most exercised scalpel, and all the means of investigation of anatomical analysis, have not been able to discover the causes. It would be a vain pretension on the part of the pathological anatomist to try to find constantly a material alteration, palpable in the organs to explain these fatal terminations in the woman who is confined, or who is still under the influence of the puerperal state. The pathological anatomist is forced to recognize his inability there, or perhaps his means of experiment, insufficient and confined, force him to stop. It is permitted to the physiologist to study the mechanism of these moral causes, in the development of certain diseases, and in the production of several deaths. Pain and joy kill, and this truth is not only of the domain of poetry, but it belongs as entirely to that of surgery in general. The moral apparatus of the woman has its education, its disposition, its proper diseases. If the cerebro-spinal mass is identical in all as to its anatomical organization, it must be for its effects, its manifestations, its language; it is modified, on the contrary, under the influence of education, and it explains to us why, in the puerperal state, with some nervous and excitable women, their imagination, more easy to be moved, more susceptible of exaltation, abandons itself more easily to all the excess, perverts itself and goes astray. We find, in the work of M. Foissac, on Meteorology, a brilliant parallel of these kinds of organization. "We see," says he, "certain constitutions drawn from these delicate influences, and, for example, those persons, in quite a large number, who feel and thirst as they digest, whom physical storms no more than moral accidents either trouble nor divert from their accustomed way, and whose life enclosed in the realities of *positiveism*, neither know the digression of imagination, nor the multiform shades of sensibility.

The preceding reflections are applicable to these natures. Shall I say unhappy? Shall I say privileged? For whom the sum of happiness and of suffering is double, from their manner of feeling them; they apply themselves to those sensitive intellectual persons for whom a light thorn, physical or moral, is a sharp harpoon; to those persons, in fine, devoted to study and contemplation, anxious for the past, gloomy for the future, and more or less oppressed by the *tædium vitæ*, which penetrates the heart, as the worm the calix of the flower or the fruit ripened by summer."

As to the etiology of sudden deaths, in consequence of moral emotions during the puerperal state, we do not make a false approach when we compare them to the sudden deaths, the consequence of physical pain and nervous exhaustion. In the case before us, the nervous system, worn out also, no longer sends to the necessary organs for the support of life the influx which is indispensable to maintain in play the wheels of the economy. The causes of death in consequence of lively moral emotions exist, according to Cullen, in the brain. According to Bechat, the moral emotions affect the brain but secondarily; it is the heart which ceases to act the first in these cases, and after it, the death of the other organs; the emotion of joy or pain bears on it specially their influence, and as soon as its movement is arrested, very soon all the parts become immovable.

Whether it may be from a cause in the heart or brain that death takes place, it is none the less true that it is always under the influence of the nervous system, from a dynamic lesion of the cerebro-spinal organ to which man owes the place he occupies, in the animal scale.—*Cincinnati Medical Observer.*

## *The Medical Treatment of Insanity.* By M. H. RANNEY, M. D., Resident Physician of the New York City Lunatic Asylum, Blackwell's Island.

*Read before the Association of Medical Superintendents of American Institutions for the Insane, May,* 1857.

In presenting my views relative to the medical treatment of Insanity, I shall be very brief, tracing only the general outlines of the course pursued by me in a few of the best-marked forms of this disease.

The object of the report is to obtain an expression of the views of the different members of the Association on this subject, to attain which it is necessary that there be no misunderstanding as to the particular disease described. The treatment of insanity is the great desideratum, although in fact subjects of secondary importance are much more frequently discussed. The peculiar ideas entertained by the members as to ventillation, the construction of water-closets, &c., are generally understood; but I am unable to say that there is an unanimity of opinion as to the mode of practice in any one of the various forms of insanity. It may be, perhaps, impossible to determine the exact treatment which should be pursued in a particular case, but the general principles, at least, that govern our course in a certain defined form of mental derangement, can be given as well as in the treatment of physical diseases generally. I assume that there are conventional terms, which convey to the mind definite ideas of certain forms of disease which, when referred to, suggest a group of associated symptoms that, taken collectively, constitute a distinct variety. It is only to a few of such well-known and recognized forms that reference will be made.

In insanity no new faculties are created, but those already existing are modified by the conditions of exaltation, depression, or perversion. The type of the different varieties of disease may be found in the normal state of the mind. This consideration affords important aid in distinguishing one form of mental disease from another.

I shall first refer to Acute Mania. The physiological type of this disease is given more nearly in anger marked by violence than in any other state of mind. The leading characteristics are, impassioned, moral and intellectual exaltation (the one exhibited by perversion, the other by delusion,) the rapid flow of ideas, violent gesticulation, disposition to overthrow or destroy the furniture of the room, sleeplessness, and wild expression of the eye and countenance, betraying great disquiet of mind. Undoubtedly the term of acute mania recalls a certain grouping of symptoms, and conveys more accurate notions of the condition than would the minute description of an individual case, since by abstraction the essentials in particular instances have been selected and combined to form the general idea. Taking it as granted that the form referred to is fully recognized, the medical treatment will be briefly considered. A careful examination must be made into the general condition of the system, as well as of the functional disturbance of any organ that might affect the brain. The success following treatment depends much upon the care exercised in the duty. The patient should, as far as possible, be excluded from all excitement. In most cases the condition of the stomach and bowels are disordered, to correct which an active cathartic should be prescribed. For this purpose the combination, hydrarg. sub. mur. gr. x, pulv. jalap. gr. xx, may be administered, and if the patient be of full habit a grain of tartarized antimony may be added. The skin is often dry and unclean, requiring, after catharsis, a warm bath, and pulv. ipecac. c. gr. x, the following night. On the succeeding day, if the patient be plethoric and there seem to be a determination of blood to the brain, commence with ant. et potass. tart., gr. ss. *ter in die*, which should be gradually increased until nausea follows; cold applications may be made to the head, and spts. ammon. ascetat., or spts. æth. nit. to act upon the secretions. If there be unnatural rapidity in the pulsations of the heart still persisting, tinct. verat. virid. gtt. v, ad. x, *bis in die*, may be substituted for the tartar emetic. If for several days the patient continue violent, ol. tiglii. is to be applied to the back of the neck and behind the ears; selecting for this a proper time in the advance of the disease, a full eruption is usually followed by marked improvement. As soon as the prominent symptoms of violence yield, morph. sulp., gr. ss. *ter in die*, is substituted for the remedies before specified, or if, at the time of admission, the patient be emaciated and apparently prostrated, either morphia or opium is given directly after the warm bath. Under these circumstances a full diet is urged, and if with restlessness and high excitement an anæmic state of the brain is believed to exist, a supply of meat rich in fat is liberally furnished. Beer and milk-punch take the place of other drinks. Tonics, such as ferri carb., potass. iodid., &c., have a favorable action, and even quinine is occasionally admissible. When violent paroxysms are separated by lucid intervals, as in recurrent mania, quinine, in doses three times a day during the quiet period, has been found highly beneficial.

My attention was first called to the use of this article by a paper read before this Association three years ago, by Dr. Tyler. Since then I have often used quinine in cases of the recurrent form of insanity with decided success. In many the lucid interval was prolonged, the paroxysm less severe, and in few instances complete recovery was the result. If masterbation was suspected as a cause, free applications of croton oil were made to the penis and scrotum.

Amenorrhœa is a frequent cause of mania in girls between the ages of 15 and 25, while in later life menstrual disturbances usually produce melancholia. Mania from this source yields readily to proper treatment. The tr. al. et myrrh. to remove constipation, Lugol's solution, or some other form of iodine, with stimulating applications to the mammæ, effect, ordinarily, a cure in two or three months. In that form of mania in which little violence exists—the patient seeming like one inebriated, yet moved by that same mischievous propensity that is found in a variety of nymphomania, opium in large doses controls quite effectually the undue exhilaration of spirits. The common course is to commence with tinct. opii., 1 dr. *ter in die*, which is doubled at the expiration of the first, or even increased to three drachms, if found necessary, at the end of the second week. From the peculiar state of the brain and nervous system, these large doses are not only tolerated, but produce little sensible effect aside from allaying the excitement and occassioning active emisis and catharsis. These last conditions render it often necessary to omit the medicine for a day.

Melancholia, the lypemania of Esquirol, is another form of mental disease readily recognized. The elementary type is found in fear, sorrow, or grief, as exhibited by a mother in the loss of her child, or in impending calamity, The peculiar marks which distinguish this affection are exaltation of the sentiment of sorrow, entire concentration of mind on one idea or class of ideas, and an inability to direct the attention to any thing not immediately connected with that which wholly absorbs the mind. It is frequently dependent on some bilious or uterine derangment, and in the selection of medicines attention should be directed to this fact. To correct the secretions mass. hydrarg., or the hydrarg. cum cretâ, may be used. Where a sufficient alterative effect has been produced, opiates in small doses are indicated. The object is to partially remove the intense grief or fear which characterizes this form of disease. Morphia in small doses may for a long time be continued. During its administration gentle laxatives will be required; for, aside from the effect of opiate, there is a tendency to constipation. The patient generally refuses a proper amount of nourishment, leaving the vital powers greatly reduced, and requiring tonics and stimulants—such as ferri carb., porter, &c. If a propensity to commit suicide exist, the occasional application of blisters, or ung. antimon. to the back of the neck, lessens much the danger of such an occurrence. It may afford benfit, in part, by relieving congestion of the vessels of the brain, but principally from the substitution of a real for an imaginary trouble.

Of the remaining forms of Insanity Dementia alone is that which I now shall consider. Its fundamental type or analogous exists in natural dullness of intellect. The leading characteristic is an enfeeblement of the intellectual faculties, or even a complete obliteration of their manifestations. Dementia is usually a sequel of mania or some acute affection of the brain; rarely an idiopathic disease. Moral treatment is of much more importance than in mania, or melancholia, yet a judicious use of medicines will aid much in the restoration of reason. To relieve anæmia, nutritious diet and the free use of chalybeates are requisite. The object is to supply the brain its proper stimulous by enriching the blood, and thus arousing its dormant excitability. As the muscle loses its contractile power from long inaction, so may the brain, although unchanged in structure, cease to perform its proper functions, from previous long-continued disease. The phosphates of iron and manganese become valuable in this disease by furnishing the necessary amount of phosphorus for generating the nervous force. In a few instances rapid improvement has followed the use of cannabis indica, which seems to have a special tendency to stimulate the senses, and excite the moral qualities. Those cases in which dullness of intellect depends on a congestive condition of the brain are benefitted by counter irritants, such as blisters, ung. antimon., or ol. tiglii applied to the back of the neck. The most favorable results occasionally follow accidental sloughing from the application of tartarized antimony, while the same effect may occur from an extensive abscess.

Such are my views in regard to the ordinary course to be pursued in treating the foregoing forms of insanity, each individual case requiring, however, modifications of treatment corresponding to the particular cause, age, sex, temperament, condition of system, &c. Adopting the somatic theory as to the proximate cause of insanity, that the material part, the brain, is the seat of disorder, while the immaterial is not subject to change, there can be no reason why medicines should not exert a controlling influence over this disease. Not only is the physical organization directly affected by medicinal agents, but over the mind itself the manifestation of the immaterial through the medium of the brain is subjected to their restoring influence. Narcotics, especially, seem to act immediately on the brain, producing a marked physical effect. Some excite the senses, others produce in the intellect the most brilliant images, and a few exert their influence over the moral faculties. The first effect of opium is to allay the passions, not only by lessening directly the most violent anger and poignant grief, but also by occupying the attention with fanciful and pleasant imagery, tending to induce cheerfulness and contentment. Hyoscyamus, on the contrary, is supposed to arouse anger and jealousy, while belladonna, in large doses, occasions gloomy thoughts and dejection of mind. Stramonium affects the senses primarily, and, in moderate quantities, disposes to convulsive merriment. From the use of cannabis the activity of the senses is increased, and the most surprising delusions follow, which may continue long after the immediate stimulus has passed away. The effects of narcotics are not more fully understood, but sufficient is known of them to call for a careful discrimination in their use. It is well settled that they act on the mind, and that each has some peculiar characteristic distinguishing its action. If this be granted, it necessarily follows that with a knowledge of the change produced by this class of remedies on the different faculties of the mind, a proper selection for the individual case must be attended with good results.

In thus presenting my views it must not be understood that I advocate entire reliance on medicinal agents in the treatment of insanity. The adoption of proper hygienic rules is essential, as in physical disease generally. Moral treatment, including employment, amusements, the establishment of regular habits, *&c.*, is also a most important auxiliary to recovery. This is particularly true where derangement of mind has existed for years. But while admitting the importance of moral treatment, I would avoid an over-estimate of its mechanical part, and carefully investigate not only the laws of physical action, but the influences of medicine on the manifestations of mind, that our noble profession may not become simply an art.—*American Journal of Insanity.*

From the British and Foreign Medico-Chirurgical Review.

## *Review of Nature and Art in the Cure of Disease.* By Sir JOHN FORBES, M. D., D. C. L. Oxen., F. R. S., Fellow of the Royal College of Physicians, Physician to the Queen's Household, &c., &c.—*London*, 1857. pp. 264.

The inquiry which Sir John Forbes suggests, as to the relative powers of Nature or Art to cure Disease, is one that involves a variety of questions affecting the science, the practice, the polity, and the ethics of medicine. The regiminal treatment of disease is by no means an invention of modern date, but its merit, as opposed to a more decidedly medicinal treatment, divided the ancients, as it has formed a subject of discussion in more recent times. The public have also ever been alive to the question, in evidence of which we would only quote one lay-author, who, in the 'History of Foundling,' observes:

"If the number of those who recover by physic could be opposed to that of the martyrs to it, the former would rather exceed the latter. Nay, some are so cautious on this head, that to avoid the possibility of killing the patient, they abstain from all methods of curing, and prescribe nothing but what can neither do good nor harm."

Fielding evidently thought Nature was not to be trusted, for he continues:

"I have heard some of these with great gravity deliver it as a maxim, that Nature should be left to do her own work, while the physician stands by, as it were, to clap her on the back, and encourage her when she doth well."

The subject is one that every tyro in the profession occasionally reflects upon; but it is essentially one upon which the opinion of men who rank highest in the profession, by the length of their experience, or the labors by which they have achieved distinction, deserves to be listened to with the most respectful attention. The book before us is the production of one who, after having been engaged in the practice of medicine for fifty years, feels, to employ his own words, that his profession has claims on him for much more than he has hitherto been able to give it, but that he is called upon now to communicate any information he may possess, if he is to communicate it at all.

"In doing so," he continues, "I cannot help being impressed with the feeling of solemnity which naturally accompanies any act that is to be the last of its kind. And in this mood I would fain regard the present work in the light of *A Legacy to my younger brethren*, which, slight as it is, may not be found altogether unworthy of their acceptance. I would indeed bequeath it in full confidence of its value, if I might reckon on its being received in the same way as the Legacy of the Pot of Gold in the fable was received by the rustic testator's sons. If my book—though, like the old man's vineyard, really containing in itself no gold—should only lead to the zealous cultivation of the subject of which it treats, the result could not fail to be of inestimable value to the cultivators. For, on the profounder, more critical, and purer study of Nature as manifested in disease, rest, in my judgment, the best hopes of improvement in the medical art; and to this study the spirit of my book may, at least, lead the way and give the initiative, if its actual contents are found of less importance."

The error which the author regards as the great taint of medical science, and which he combats throughout this book, is a want of trust in the powers of Nature to arrest the process of disease, and a consequent overweening faith in remedial agents as the sole means of cure. His main object is to endeavor to expose these misconceptions, so as to impress the minds of the younger and less prejudiced members of the profession with the truth and importance of the principles advocated, and also to prepare a work which might convey to educated members of the general public a juster knowledge of the real nature of disease, and the true characters and powers of the medical art. Dealing professedly in deductions of which the premises are supposed to be known to the reader, we fear that, however intelligible the author may render his views to professional readers, the unprofessional reader will fail to appreciate them, because the first elements—the actual observation of disease—will be wanting to enable him to judge of the justness of Sir John Forbes's remarks. The current theories of the day generally ooze out sufficiently to infect the lay public; a true theory of disease, one, to use Mr. Spencer's words, of which the negation would be both false and inconceivable, once established among our Asklepiadai, and the public would not fail speedily to be imbued with so much knowledge as would be good for them. Until our own banquet is secured, we do better not to invite strangers to the feast; but we may prepare them against the happy consummation, by placing before them such sound and wholsome fare as they can safely digest. Let the public, high and low, be instructed in the plain, well-improved facts of anatomy and physiology; let them learn the wonders of our healthy fabric, and the greater marvels of the functions that minister to life; and thus prepared, we will induct them into the inner shrine, when we ourselves have raised the veil. Our duties to ourselves and to our high calling demand an humble, earnest, and assiduous devotion to the study of Nature in health and disease; we may thus ultimately succeed in understanding, to the full of man's capacity, workings that are yet mysterious; we may thus obtain, at last, what is the very starting point of Sir John Forbes' Theory of Therapeutics—*A Natural History of Disease.*

But, though we may be a long way from the goal, we must not ignore the fact that the whole tendency of the present age is to arrive at an interpretation of disease, such as the author shadows forth; Physiological Pathology, which forms the title of more than one work of distinction of recent date, has for its object the search into the relation of the morbid processes of disease to the analogous process of health; or into the mode in which the normal changes of the body are perverted, in the disturbances constituting a deviation from health. What is the meaning of the term metamorphosis, of tissues, now so often employed? Is it not applied equally in physiological and in pathological conditions, and do we not know that that metamorphosis passes through an endless variety of phases, both in health and disease; but that the transition is often imperceptible, shewing the non-essentiality of disease as a separate entity, and proving that, in many cases at least, the same elements go to make up the sum of disease that previously, in a somewhat different order, constituted the normal state of health?

Let us suppose, for instance, that one of the essential features of pneumonia consists in the arrest of the chlorides of the blood in the lungs; physiology instructs us that a certain average of chlorides passes off by the urine in the four-and-twenty hours, and pathology informs us that an individual laboring under certain symptoms, termed inflammation of the lung tissue, the renal secretion yields a much smaller quantity of this constituent; we conclude that by restoring the secretion of chlorides by the kidneys, we shall relieve the organs of respiration, and promote the restoration of the various disturbed functions to their healthy condition.

The practical question, then, comes to be, whether we may or may not rely exclusively upon the natural powers to aid in its re-establishment, or whether we may trust Nature herself to effect it.

Again, let us take the case of a person wasting under a tubercular disease, in which hectic and colliquative sweats and diarrhœa are sapping the vital powers; we know that the metamorphosis of the tissues is going on so rapidly that, if left to herself, Nature will speedily wear out that thinning frame,—may we still place our faith in the tendency of disease to overcome its own evil, or in the unaided physiological powers to cast out the demon? or may we come to her aid with such helps as the study of Nature has proved to be conducive to an arrest of that excessive metamorphosis, and thus, if not save life, yet prolong its span? Or, to select a still more striking example, as capable of more positive synthetic and analytical proof:—in metalic poisoning, where all the tissues of the body are impregnated with the metal, and where disease is produced by the presence of the foreign substance in the muscles, the brain, the bones, what results are certain to occur if Nature, unaided, is required to cure the disturbance of function, the disease, that ensues? Will Nature eliminate the lead that causes the Burtonian line, or does she not rather wait for Art to come in with her sulphur or her iodide of potassium, to expel the enemy, who had effected so secure a lodgment that she alone would never have mastered him?

These are some of numerous instances that may be already alledged as indicative of the means by which we may rationally aid Nature in the treatment of disease; while especially the last two are brought forward to show that nature, or, in other words, the physiological forces of the system, do not suffice to restore health to the sufferer. We look forward with confidence to the time when the range of Art will be still further increased, and her relation to Nature still more accurately defined. But of one thing we are as certain as Sir John Forbes could desire us to be, that unless, in all our remedial administrations, we consult the laws of physiology, and seek to avail ourselves of the inherent powers of the constitution to remove disease, we shall ever fail to be masters of our art, and shall go about, ourselves blind, seeking to direct the blind. The real question in therapeutics is, what can Nature do unaided?—can she do it in the most expeditious way alone?—does she require some artificial assistance, or is she altogether unable to restore health without the intervention of art? In the above instance we have sought to illustrate some of the ways by which we may assist nature. Undoubtedly, in the majority of diseases, Nature, that is, the physiological process—tend to remove disease by restoring the natural balance of the powers; in many she does so most expeditiously, if left to herself; in many the processes may be facilitated if we adopt the hints which the balance and the test-tube afford; in some she appears overcome by the noxious influence, and to succumb, unless a powerful antidote be administered, which, by neutralizing the poison, enables the physiological influences again to assert their power, and to restore the balance of health.

We are tempted to place before the reader a formula by which we have sought to make clear to ourselves and to students the various points of view under which we may regard diseased processes, and which has appeared to us to facilitate the *rationale* of our therapeutical applications.

If we represent the normal constituents of the body by $a$, $b$, $c$, $d$, $e$, and assume that in health they occupy the relation to one another of $a+b+c+d+e$, disease may be regarded as taking place in one of three ways, which may as readily be represented by an algebraic formula.—Either the constituents are simply deranged, and they come to occupy a different mutual relation; or an elision of one or more of the elements may take place; or thirdly, a foreign element may be superadded. In the first case the different forms of disease may be as numerous as the changes that can be effected in the relative position of the elements, and instead of the formula, $a+b+c+d+e$, we may find them in the relation of $a+d+e+b+c$, or of $b+d+c+e+a$, and in many others. It is manifest that, if anywhere in the treatment of disease, this category will probably be the one in which we shall find the most numerous instances of what Sir John Forbes terms the power of Nature in curing disease,—that is to say, that the interference of medicinal agents will be less necessary, because, by placing the patient in a proper condition as regards noxious influences, by allowing the powers of his constitution to find their proper balance, the derangement of the constituents of health will be rectified. It becomes a question for further inquiry, whether it is not a due and legitimate prerogative of Art to ascertain that Nature is able to achieve certain results, when the conditions are granted, and to grant those conditions. We are willing at once to confess that since our first initiation into the mysteries of medicine we have abhorred the doctrine that our art consisted exclusively in the administration of pills and potions. To return.

Our second category—that in which an elision of one or more of the elements occurs—would be represented thus, $b+c+d+e$, or $a+b+e$, or let $E$ represent the elements in their normal strength and order, the above two instances would stand thus respectively: $E-a$, and $E-(c+d)$. The inquiry to be made in this case in regard to therapeutics would be, whether the powers of Nature would be adequate to restore the deficiency, or whether it would be requisite to supply the element which we found wanting by artificial means, or, in other words, by drugs. There can be no doubt that here again the physician will often do little more than place Nature in a position to work out her own salvation; but at the same time he may, by the judicious administration of the deficient element, materially expedite the process. To take a familiar instance. The blanched lip and the pale tongue of an anæmic patient challenges us to prescribe a salt of iron, because we know that element to be wanting to restore our patient to health. By hygienic means alone, by fresh air, improved diet, and cold sponging, the system may be enabled to take up from the food the necessary iron without medicines; but we all know that either we cannot place our patient in circumstances in which the hygienic means are available, or that the process is very tedious, and will be much expedited by the administration of five grains of the ammonio-citrate of iron three times daily, half-an-hour after meals. Then, naturally, both the patient and the physician agree that the citrate of iron shall be taken.

In our third category we place those forms of disease in which we discover a new element superadded to the normal constituents. This can be nothing else than a poison, which may be of an organic or an inorganic character. The formula here would be $(a+b+c+d+e+)+x$ or $+y$; or, representing the normal elements collectively as $E$, the formula would stand $E+x$ or $+y$. The duty of the medical man here would manifestly be first to recognize the presence of the $x$ or $y$, and then to determine upon its best mode of elimination. The same question arises as was put before. Do the powers of Nature suffice to produce the desired effect, or do they not? No one, we think, will affirm generally that they suffice; while probably every medical man of experience will readily admit that in many instances the unassisted powers of Nature will secure the elimination of the $x$ or the $y$. But we claim for the medical man the right to place Nature in the right position to develop her own powers, and we all know that the intervention of the physician for that purpose is often most essential, as Nature does not herself always assert her right to be heard in her own cause. Were it otherwise, probably neither Sir John Forbes' book nor this Review would have been written. On the other hand, it is unnecessary to quote instances in proof of the statement that unaided Nature—i.e., Nature without physic, *sensu strictiore*—is often inadequate to secure the elimination of $x$ or $y$, and that without the eliminant, $x$ or $y$ will continue to infest our patient's tissues, racking his nerves, exhausting his vigor, turning his muscles into fat. There may be a medium between these two extremes; we may know that Nature will suffice to remove the poison, but we know also that in its passage through the system it will leave an idelible impression, or that much time will be wasted by the process; and we have an agent at hand which will accelerate the movement of the elements, and secure a more rapid evolution of $x$ or $y$, shall we therefore not employ it because Nature might have carried out the work alone? Not to allow the employment of the drug under such circumstances would be tantamount to a wilful rejection of the boons accorded to us by Him from whom Nature has her source. *Omne simile claudicat*, and a limp may probably be discovered in any and every theory that was ever proposed; therefore, we guard ourselves against the charge of representing all diseased actions by the above formulæ. Before concluding this brief exposition, we would merely add, for the benefit of any one who may be tempted to follow out our method more into detail, that the three categories would, even theoretically, necessarily often pass into one another; thus, whether an element were deficient, or a new one superadded, in either case the remaining elements might change places in a manner represented by the first category; or an element might be wanting, while a foreign constituent were superadded; it is clear that by going into a detailed comparison between individual forms of disease and the formulæ, we should often meet with very complex arrangements; these we have at present nothing to do with, as it is not our wish to dilate upon a mathematical representation of disease, but simply to show the point of view in which we regard the various demands made by diseased processes upon the therapeutical interference of medicine.

We think that by the above analysis we have rendered to ourselves more clear what may be expected of Nature in Sir John Forbes' sense, what of Art. Still, before proceeding to a further examination of Sir John's views, we would protest against that assumed antithesis being made a ground of accusation against the medical profession at large.—Many there undoubtedly are who think that without medicine no disease can be well cured; but we feel satisfied that the great bulk of all educated members of the profession—and, thanks to modern progress, we may hope that that comprises the majority of all its members—consider themselves rather as ministers and interpreters of Nature than as Titans who are engaged in a constant warfare with her vicious manifestations. That interpretation may often be erroneous, but the attempt to discover it argues for the fact that the medical man does not desire to place his art in contrast with Nature.

If we are right in assuming these remarks to apply very generally to medical men of the present day, we by no means assert that such tendencies have always prevailed; the fact that they did not prevail some years ago, in this country at least, was proved by the animated opposition which the enlightened views of Sir John (then Dr.) Forbes excited when put forth in 1845, in an article on Homœopathy, Allopathy, and Young Physic. Twelve years are but a comparatively brief space of time in the development of a nation, or of an important integral part of a nation, yet any one who is conversant with the feelings, and views, and the general state of education of medical men, during the last twenty years, will, we think, bear us out in the opinion that, scientifically and ethically, great onward strides have been made. We cannot but believe that the courageous advocacy by Sir John Forbes of views much opposed to the prejudices of a large class in the profession, have contributed not a little towards the reformation of the *drugging system.* Most sincerely do we thank him as a benefactor of his profession and of mankind. At the same time we are constrained to admit that we are far from arriving at that goal of certainty which we all desire to attain; and we would willingly enlarge our knowledge of the relative powers of Nature and Art in the cure of disease. Sir John appreciates the difficulties that impede the attainment of this desirable end, but speaks more lightly of them than we think the case justifies.

"The main obstacles . . . . lie rather in the circumstances under which the subjects are presented to them than in the subjects themselves. When we have the proper field for investigation before us, there is very little difficulty in obtaining a positive and accurate knowledge of the power possessed by Nature in relieving and curing diseases. The phenomena to be observed are neither very numerous nor very complex; the facts are easily obtained, and the deductions are both facile and sure. All that is requisite to insure a positive and pure result is, in the first place, to take care that no artificial interference disturbs the organic processes going on; and, in the second place, to observe and chronicle progressive events. It is a case of simple observation throughout; no sifting of premises, no elimination of causes, no grouping or balancing of effects being requisite to insure a just conclusion. The just conclusion—the exact valuation or appreciation of the power under examination—is enunciated in the simple fact indicating what has been the issue of the organic processes constituting the disease. The sum total of beneficial modification of the morbid processes, whatever it may be, whether amounting to a complete or an imperfect cure, must be acknowledged to be the exclusive work of Nature; in other words, of the conservative powers inherent in the living."—(p. 25.)

The author admits that there are difficulties in finding the proper field for study; but this we do not regard as so serious a difficulty as the determination of where medicinal interference commences, and where it ceases. All writers on materia medica claim baths, hot and cold, as belonging to the *armamentarium medicorum;* the regiminal physician would probably claim them as coming within the pale of regiminal treatment, though we should be inclined to assert that the natural man abhors the cold bath, and only learns to love it by degrees. The application of ice externally and internally is a powerful remedy, but may belong to either party; poultices to the surface or the mucous membranes (in the shape of mucilaginous beverages) are instances of a similar kind; ripe fruits, raw or cooked, are regiminal, but their acids and neutral salts administered in solution would be eschewed, because they would come to the house by aid of the apothecary's boy. We quote these instances in no spirit of levity, but to show that the question is not in reality so much one to be settled by two opposing parties—the medicinal and the regiminal physicians—but that the inquiry to be prosecuted must and may be carried out contemporaneously by all who are anxious to elevate the science of medicine, and place it on a sure basis. No humane physician would consent to watch the progress of a case of neuralgia under purely regiminal treatment, when he knows that a grain of morphia will arrest the pain and give rest to the sufferer; nor would he allow a patient's health to continue to deteriorate because he did not choose to administer a drachm of the oil of male fern for the removal of tænia which infest his intestine. These, and numerous other instances of a similar character, would have to be eliminated before fixing either the diseases or the drugs which were to form the subject of study. Thus the question necessarily becomes more and more narrowed, and at last we arrive at the conclusion that what we have to investigate is rather how much or how little influence individual drugs are able to exert upon certain diseases than that we declare ourselves followers of this or that banner. When we examine the author's statements with regard to the "instruments of the medical art," we gather that, although so powerful an advocate of an essentially regiminal treatment of disease, he by no means despises or rejects the exhibition of drugs; thus, in speaking of alteratives, he says, "the class contains some remedies of positive and evident power;" he lauds opium and its products, as being "some of the noblest instruments of the medical art," and says that "the class contains a good many other agents of analogous though inferior value." Of genetica he says that the "class contains only three or four drugs, but they possess a positive power of greater or less extent." Scarcely a class is passed in review of which not something more or less favorable is said; we doubt much whether a physician who believes—may we not say knows?—that he has command of a remedy of "obvious and admirable power," would refuse to allow his patient all the relief the drug can afford, in order that he might test whether the unaided powers of Nature sufficed to remove the disease he labors under.

The reader will naturally inquire into the manner in which the author of the book under consideration reconciles the apparent contradiction involved in his all but unlimited faith in the powers of Nature to cure disease, on the one hand, and his laudation of drugs, as exhibited in our last remarks, on the other. We will quote his own words in reply, merely premising that Sir John terms the system he advocates, *Auxiliary or mild treatment, rational expectancy.*

"This modification of the indirect physiological method of treating diseases (more especially acute diseases,) I regard as at once the most philosophical, the safest, the surest, and the most successful of all the forms it assumes. . . . . In the first place, it completely recognizes the autocracy of nature in the cure of acute diseases, and proceeds on the principle that it is not only useless, but injurious, to attempt to suppress or greatly to modify the morbid processes by strong measures of a perturbative or exhaustive kind.

"The indications which this mode of treatment seeks to fulfil are chiefly the following:—1st. To place the diseased body in the most favorable circumstances for the development and exercise of its own conservative powers, by the institution of a proper regimen, in the most comprehensive sense of that term. 2d. To endeavor thereby, or through the use of medicaments, to remove such obstacles to the favorable action of the conservative and restorative powers as may be removable without the risk of checking or injuriously perverting them. 3d. Applying these measures under a watchful supervision; not to attempt by any vigorous measures to alter the course of the morbid processes so long as they seem to keep within the limit of safety, and when they transgress, or threaten to transgress this limit, only then to endeavor to modify them by such mild measures as, if they fail in doing good, cannot do much harm. 4th.

To be on the watch against possible contingencies, which may demand the employment of measures of exceptional activity, whether in the form of regimen or medicine, and, when required, to apply such measures with the necessary vigor."—(p. 239.)

So far as this method combats the purely empirical proceedings and the treatment *a la Sangrado* that we all have seen, we most heartily concur with Sir John Forbes, and we think that if he had much familiar intercourse with physicians of less than twenty years' standing, and had the opportunity of judging of their practice, he would find that the prevailing fault is not so much a tendency to trust over much in drugs, as to be sceptical of their utility. There is a scepticism which leaves its holder in a slough of despond—a scepticism which, having no positive basis whatever, vacillates with the wind of public opinion or with the accidents of daily life. The medical man whose knowledge is of a calibre to allow him to become the prey of such scepticism, may be regarded as the most unfortunate man under the sun, for no professional act of his can be attended with any degree of moral satisfaction; he will be inclined to say with Dr. Cayol, " Les systemes en medicine sont les idoles auxquelles on sacrifie des victimes humaines." But there is another scepticism, which is the characteristic of all men of science, which co-exists with the warmest love of his profession and a full faith in the powers of his art, in the heart of the zealous and earnest physician; it is the skepticism which leads him to be suspicious of his own observations and of his deductions, until by repetition and by comparison with the results obtained by others, he has placed his conclusions on the firmest basis upon which a scientific fact can rest. Such is the scepticism which has ever distinguished the most elevated in our ranks,--we think that the general advancement of the profession, and the greater humility which that increased knowledge has brought with it, have spread more generally that form of scepticism which we would uphold as a laudable feature of our times. Still we are also satisfied that while many of the views advocated by Sir John Forbes are in a great measure the views held by the majority of physicians of the present day, we have a more positive knowledge of the extent and limits of the powers of Nature on the one hand, and of the real uses of drugs on the other, in the cure of morbid states, than has been possessed by our predecessors. If we keep to the path we are pursuing, and continue to seek to interpret Nature correctly in all her phases, making Physiology our main instructress in the manifestations of disease, but not disclaiming any aid obtainable from all the handmaidens of the physician, we shall pass safely through the Scylla and Charybdis of dogmatism and false scepticism. We shall retain our faith in the powers of Nature to cure disease, but we shall no less continue to believe that "the Lord hath created medicines out of the earth, and he that is wise will not abhor them."

In the preceding remarks we have sought rather to indicate the spirit that pervades Sir John Forbes' book than to give our readers a summary of its contents. With its spirit we cordially sympathize, for it is a spirit of earnest hatred of all quackery, of manly affection for the high objects of our common profession. We cannot deny that the author appears to us to underrate the value of medicines, but so long as with us the professional man and the tradesman are blended together, and Government takes quackery under its special protection, so long there will be little risk of drugs falling generally into disrepute; and we may say of Sir John, as of the Man of Ross, that

> "E'en his errors leant to virtue's side."

With this reservation, we do not hesitate to repeat that we cordially agree with the author's general views, and recommend his "Legacy" to all medical men who earnestly seek for truth in the daily practice of their surpassingly interesting profession.

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From the Virginia Medical Journal.

## *The "Hotel Endemic" at Washington.*

We have refrained from any remarks upon the sickness which prevailed at the National Hotel in Washington, during January and February last, while without other data respecting it than the vague and unauthenticated statements of newspapers. The official investigations, which have since been instituted, enable us to place on record the plain facts of the case. These, as they were elicited by a committee on the board of health, are concisely stated in a letter, from the pen of the professor of anatomy in the Washington Medical College.

The greater number of those persons who were attacked with the "hotel sickness," were attended by Drs. Boyle and Hall. We reproduce in full the testimony of the latter before the board of health. The opinion of its learned, sagacious, and experienced author will have great weight with medical men, though it may not satisfy an excited public sentiment, which prefers to view the hotel calamity as a new Guy Fawke's plot, rather than a solemn lesson that hygienic laws cannot be violated with impunity:

*Testimony of Dr. James C. Hall.*—I am a practising physician in the city of Washington. I saw one of the first cases of the disease that recently made its appearance in the National Hotel. The patient occupied a room in the fourth story, and was affected with diarrhœa, loss of appetite, and irritable stomach. This was in the latter part of January. About the first of February I was called to see other cases, the weather at that time being extremely cold. Usually the disease would make its first appearance in the morning, the patient having retired at night apparently well. Profuse operations, always presenting the same appearance, * * * and of a frothy or yeasty appearance, accompanied with much flatus. If the diarrhœa were checked by opiates or astringents, vomiting supervened, and if the vomiting ceased the purging returned. There was some pain, but not that characteristic of inflammation; rather that caused by distension from flatus. In some protracted cases there was pain upon pressure, but not the pain of acute inflammation. There was a great thirst and a desire for acid drinks. Sometimes there were cramps, but no enteritis. Farinaceous diet was the best. The stools did not present the appearance of metallic poisoning. I have seen repeated attacks of dysentery and cholera in houses, attributed to filth, but they did not present the same appearances as this disease.

I do not believe that the disease at the National Hotel was caused by metallic poisoning. Poisoning by a metallic substance acts as a local irritant, causing pain, tormina, tenesmus * * * * not a profuse diarrhœa, and the disease proceeds steadily either to terminate favorably or fatally. I believe that the cause of the disease that has prevailed at the National Hotel is a blood poison taken into the system through the medium of the lungs; that is, a miasm pervading the atmosphere of the hotel. It may possibly also have been absorbed by the food from the atmosphere. I think that closing the sewer at the corner of Pennsylvania avenue and Sixth street causes the noxious air contained in the sewer to pass into the hotel and disseminate itself throughout the whole house. The heating apparatus is so constructed as to assist in disseminating the vitiated air of the cellars throughout the house. The room immediately above the heater is particularly offensive. There is a flight of stairs coming directly up from the wash room, and the steam and vapor arising therein cause a current of heated air to ascend the stairway, which also causes the effluvia to be distributed throughout the house. During the mild weather in February, the disease entirely ceased for two weeks, the house being well ventilated by the windows remaining open; but when the cold weather returned and the house was closely shut, the disease again made its appearance more violently than before. I drank freely of the water used in the hotel, and it produced no disagreeable effects. I have seen a person who frequented the barber's shop connected with the hotel, although not a boarder in the house, attacked with the disease; and persons who frequented the house have been affected in the same manner as the boarders, but the disease was not as violent. Persons remaining in the house after having become ill were no worse than those who removed from the house after having been attacked. I attribute the disease to a poisonous miasm. I have had no case that terminated fatally * * * * * I have had altogether thirty or forty cases. I have no patient in the house at the present time. The disease usually returns after being checked for a few days, and these relapses are frequent. I have seen persons accidentally or purposely poisoned by corrosive sublimate, acetate of copper, arsenic, lead, and oxalic acid, and also by arsenic administered as a medicine, but in no case have the symptoms resembled those of the diarrhœa now under consideration.

I beg leave to append the following quotation from Christison on Poisons, Philadelphia edition, page 621:

"In August, 1831, twenty-two boys living at a boarding school at Clapham were seized in the course of three or four hours with alarming symptoms of violent irritation of the stomach and bowels, subsultus of the muscles of the arms, and excessive prostration of strength. * * * A suspicion of accidental poisoning having naturally arisen, the various utensils and articles of food used by the family were examined without success; and the only circumstances which appeared to explain the accident was that two days before the first child took ill a foul cess-pool had been opened, and the materials diffused over a garden adjoining to the children's playground. This was considered a sufficient cause of the disease by Dr. Spurgin and Messrs. Angers and Saunders, of Clatham, as well as by Drs. Latham and Chambers and Mr. Pearson, of London, who personally examined the whole particulars. Their explanation may be the only rational account that can be given of the matter. But, as no detail of their chemical enquiries was ever published, their opinion cannot be received with confidence by the medical jurist and physician, since it is not supported, so far as I am aware, by any previous account of the effect of hydro-sulphuric acid gas."

Christison also says, at page 491, "Another affection, sometimes brought on by putrid exhalations, is violent diarrhœa or dysentery;" and refers to the case of a well known French physician, who from such exposure, was seized with giddiness, nausea, tendency to vomit, violent colic, with profuse diarrhœa.

At a meeting of the New York academy of medicine, May 6th, Dr. Wynne, of Baltimore, being introduced by Dr. Valentine Mott, detailed the facts of the hotel endemic, and referred its cause to the effluvia arising from the ill constructed sewer. He cited several examples of identical diseases produced by similar noxious exhalations.

He stated that Dr. C. T. Jackson, of Boston, who was at Washington, during the prevalence of the disease, very justly remarks that "no chemical or reliable medical evidence has yet been adduced to prove that any one of the persons who were sick with the disease had taken poison of any kind into their stomachs." Now the question arises, can disease, presenting the characteristics of the one just described, be produced by putrid exhalation arising from deficient ventilation? If so, without the adduction of new evidence, the endemic must be attributed to this cause.

Doctor, afterwards Sir John Pringle, the president of the Royal society, than whom no man of this day was a more acute observer, in his observations on the diseases of the English troops in Flanders, says that whenever the marsh, near which the army was stationed, was foul with animal impurities, the soldiers were invariably seized with bowel irritation, amounting even to dysentery. This observation, made by this distinguished army surgeon, has been corroborated by the experience of every one having the medical care of bodies of garrisoned or field troops since his day. The experience of our own army in Florida, and more recently in Mexico, shows the great prevalence and malignity of bowel affections among those who are subjected to putrid exhalations. Nor is this confined to those who are confined to the wretched quarters of the soldiers of an army in the time of war, or to the ill ventilated apartments of the more wretched in populous towns, but often invades the luxurious dwellings of the more opulent classes.

Dr. Rigby, in his evidence before the health of towns commission, says that he has often been enabled to detect, by the sense of smell, the poisonous exhalations from sewers in the more fashionable parts of London. He considers the sense of smell as very important to a physician. A crafty nurse, says he, may hide much from the eye, but she can conceal but little from the nose of a medical man who is at all experienced in these matters. He is clear in attributing an attack of puerperal fever which seized the inmates of the Lying-in hospital under his charge, to defective sewerage and ventilation. Dr. Dray, of Kirk's college, is equally positive in tracing consumption to the same cause, and Dr. Southwood Smith bears ample testimony of its power to produce fever.

There are instances in which the attacks from this cause assume each one or the other of these forms, and others in which two or more are conjoined. This was especially the case in the Croydon epidemic which occurred in 1852. Mr. Granger, who was sent by the board of health to investigate the cause of the outbreak, and who, among other like causes, attributed the epidemic to the effluvia which escaped from the gully-holes of the old sewers, says: Besides the attacks of fever, there was a large amount of diarrhœa. Mr. Thompson had fifty cases in his practice, all evidently attributable to and forming a part of the epidemic. In the Croydon epidemic, a leading characteristic of all the cases of fevers was diarrhœa, and Dr. Granger says that, in this outbreak, gastric disturbance, traceable to putrid effluvia, was uniformly present.

We conclude this subject, for the present, by publishing a circular of the committee of the Washington board of health. It is to be hoped that it will receive an adequate response from those physicians on whose authority the hotel sickness has been ascribed to "metallic poisoning."

The undersigned have been appointed a committee by the board of health of Washington to communicate with residents of this city and persons elsewhere, in order to procure, if possible, further authenticated information in regard to the malady which recently prevailed at, and was known as the "endemic of the National Hotel." No fatal cases have occurred in this community; but, as vague and unauthenticated statements have reached us that persons have died elsewhere from this cause, we take this as the only sure mode of calling upon physicians and persons abroad to favor us with statements of the names and residences of the persons who have thus died. We desire to obtain a description of the course and symptoms of their disease; the opinion formed as to its origin and the reasons therefor; the treatment adopted in the cases, and the results of the post-mortem examinations or chemical analyses of the dejections from the sick, if any such were made. As the guests of that hotel are wide cast over the land, it is impossible for us to obtain the names and residences of their physicians, and must therefore appeal to them, through the public press, for the information desired. Their prompt attention (by letter to the committee) will confer a great favor upon the board of health and this community, and perhaps be of great service in promoting the cause of public health and medical science.

Papers friendly to the above objects will confer a favor on the board of health by publishing this card.

ROBERT KING STONE, M. D.,
JAMES E. MORGAN, M. D.
*Com. Board Health.*

WASHINGTON, May 7, 1857.

## *Pork and Potatoes: their influence on the Bodies and Minds of our People. Wisdom of the Mosaic Law.*

"Scrofula," from Scofa—a hog; see the Dictionaries.

The miserable and degrading mental feebleness with which the great mass of the people continue to ignore most subjects that effect their bodily health, until their ignorance overwhelms them with some great calamity, is certainly but ill calculated to give the health-teacher any high opinion of their intellect, or of the prospective value of his own labors to the public good. Our Lager Bier and Tobacco articles have raised such a storm amongst the elegant and intellectual votaries of those delicious luxuries, as to show pretty clearly the tenacity with which admirers will probably cling to the interesting quadruped of whose virtues we are now to discourse. Indeed, the amiable creature fairly reciprocates the compliment of their devotion to lager bier, by partaking of one portion of their favorite beverage, (it is true under the domestic inconvenience of somewhat contracted accommodations and a limited and compulsory bill of fare,) but with gratifying gusto and a still increasing fatness, so much appreciated by its biped admirer. There is an evident unkindness, however, yet we can not but think it creditable to the æsthetics of the quadruped, that he carries the compliment no further than the acceptance of a portion only of the lager bier, as a diet drink, and refuses tobacco in toto; a better physiologist than his master, he declines the intoxicating portion of the beverage, and can find none of his bodily wants supplied by smoke; the refuse of the still and the brewery, the poor fellow is constrained to take from necessity; but it passes the art of the great tyrant to make him chew or smoke; in that he surely shows the superiority of instinct over education; nor do we think we slander the gentlemen who improve their classic outlines, and dignify their steps by lager, when we compliment the quadruped for the superiority of his taste; it evidently serves him far better than that which cannot recognize the strong and acrid taste of the tobacco necessary to bring the precious beverage up to the gradually fuddling point, without which the consumer would loose his relish for it. We defy any man whose palate is sufficiently undefiled to relish a piece of wholesome bread or good beef, not to taste the acrid tobacco in many samples of the beverage; with a glass of Croton in hand ready to rinse the mouth, we have repeatedly detected it, and men of sound observation who have abandoned the pernicious drink, have often assured us that the effect of such drugged specimens is exactly analogous on the brain, to the first effect of tobacco before the system has become accustomed to it; put as much tobacco into his allowance of swill as would strengthen the lager bier up to the fuddling point, and you will soon observe the superiority of instinct over education; our life for it, the quadruped will give you an expressive glance of reproach, and refuse the proffered boon at once.

It seems, however, that this sagacity is not proof against the infernal machinations of his Western keepers; or what is more likely, that the tyranny of man has constrained the hog to eat what his instincts would teach him to refuse. We learn from our exchanges that great numbers of hogs have died in the neighborhood of Cincinnati, and indeed all over the West, from an epidemic disease analogous to cholera. Such has been the awful havoc amongst them, that we wrote to the editor of the *Erie City Dispatch* for reliable information, well knowing that we should get it from so fearless and independent quarter. Before we received his answer, which we give below, we learned that the Legislature of Ohio had passed a law rendering it a penal to put strychnine amongst the grain from which they distil whiskey! (it having been found that a vast increase of strength and intoxicating power may be given to liquor made by this process); the poor hogs were dying in vast multitudes from eating the swill, whilst the human consumer remained entirely unsuspicious of danger! Oh! oh! thought we, gentlemen of the Lager Bier trade in Cincinnati, amiable philosophers and good Christians, are you still preparing to drown our poor body in that barrel of lager, or to hoist it on that horrid pole? You have, it seems, a far more powerful enemy near home; the Legislative scalpel is too sharp for ye; ye will have to look out for some new dodge. Our friend of the *Dispatch* answered our inquiry by a letter detailing the losses at the various pens, to the number of tens of thousands, worth, when fat, six hundred thousand dollars!—He says: "We publish a short account of the Hog-Cholera to-day, from the Pittsburgh *Dispatch*, to which we ask the attention of our readers. We here wish to observe that but few people know, when they are eating pork, particularly that which has been fatted at large or in distilleries, the amount of disease and nastiness which they are taking into their stomach. You know that you are eating *hog*, but you do not know how much scrofula, erysipelas, and in many instances, the very elements of worse disease. Whole families sometimes live almost entirely on *hog*, and if the children are troubled with watery sores around the mouth, swelling and inflammation in the glands of the throat, the poor things have fever blisters, and have taken cold, which *settled in the neck!* or if they die with the croup, *Providence did it!* If anybody has ever killed a hog, and found an abscess of matter in the neck or near the kidneys, or with all the internal organs studded with tubercles, which we have seen packed for Eastern use, they have only put out of the world a miserable mass of scrofula; they did not kill anything fit to eat—nor would they, had the hog been healthy; and those who pride themselves on killing and eating fat hogs, must not be surprised if they swell up and burst. A fat hog is the quintessence of scrofula and carbonic acid gas; and he who eats it must not expect thereby to build up a sound physical organism. While it contributes heat, there is not a twentieth part of it nitrogen, the base of muscle."

This is sound practical truth. Fat pork was never designed for human food; it is material for breath and nothing more; see Liebig and other organic chemists and physiologists; it makes no red meat or muscle; the prize fighter is not allowed to eat it; all that is not consumed by the lungs, remains to clog the body with fat. As long ago as our 12th number we explained all this in an article entitled "Fat and its Uses." We cannot go over that ground again, but must be excused if we repeat in this place the sentiment advanced in that article, namely, that the man who is not acquainted with the elements of the body, and the actual value of the various articles of food that sustain it, occupies a position about as dignified as he who does not know the laws of his country, or who resigns the care of his soul to a Roman priest. The popular idea of boils and other unsightly eruptions being produced by an excess of grease in diet, is undoubtedly correct; notwithstanding the vital necessity of a good portion of wholesome beef and mutton, fat and butter, in all persons who are of low degree of life force or at all inclined to scrofula. We have most extensively treated that subject in many of our past numbers. Suffice it here to say, that fat is a vital necessity, and none can be healthy without it; but it requires a corresponding degree of exercise to throw it off by the lungs; its specific purpose in the economy is to supply material, that is, carbon, for breath, and to prevent the too rapid waste of the red meat or muscle of the body, which must and does take its place when the fat of the body is all consumed, and the individual eats none, or not enough to supply the waste by breathing.

We have said that fat never makes muscle, and we also aver that it does not give life force or capacity to endure fevers, and especially cholera. The carnivorous animal gets large supplies of nitrogen which is the basis of red meat that it eats; it has comparatively little fat, and it runs off that little very soon, and requires some fat in its food to produce more; this it gets from its prey; ready-made muscle is its food; the

Arab of the desert, and the American Indian are both lean from exercise; they rapidly consume their fat.

The hog, when fed by potatoes and kept quiet, makes little muscle but much fat; the Irish women are inclined to indolence, and eat excessively of patatoes; they are usually fat; it is the experience of every practical physician that they die rapidly from fevers and cholera, whilst the miserable lathy American stoutly resists both, and far oftener recovers; the puffiness and watery looking fatness of paupers and old prisoners who use a pure vegetable diet, and little or no exercise is remarkable; the cholera and typhus fever scourge the prisons awfully. We have seen eleven deaths in one morning, in the year '32, at Bellivue, of Cholera. Luxurious people are never strong. Activity and flesh eating give life force Indolence and vegetable eating decrease it. Whatever the cause may be of the tremendous mortality among the hogs, now existing at the West, it is very evident it is a deficiency of organic or contractile power, for they die of diarrhœa, and the general resemblance of the symptoms has given the disease the appelation of Hog Cholera.

The wisdom of the Jewish law which prohibits the use of pork, will soon be acknowledged by all rational beings. That swine are afflicted with scrofula and tubercles, we have repeatedly shown; and every killer of hogs well knows it; the indigestibility of the flesh is acknowledged, and if people were enlightened, the hog would only be raised for his fat alone; this is available in all cases instead of whale or fish oils, and will doubtless be made so in place of vegetable oils; a few excepted of the finer kinds for eating. Mutton and beef, if our farmers ever become enlightened, may profitably take the place of the hog, and would add greatly to the health and dignity of the farmers household. Hog husbandry is debasing. The influence of pork eating on the farmer is degrading; neither he nor the slave would be able to accomplish his work by the use of it, that is, the fat part, without other food, as material for muscle — Good husbandry would furnish other fats for the farmer, to say nothing of butter, which the present catalogue of the grasses and cereals, and enlightened irrigation, would furnish in sufficient abundance.

And this brings us to speak of the influence of pork eating on the moral condition of our people. If, and we emphatically aver it a correct criterion, the material and getting up of the family meal classifies the occupant of a household amongst rational and intellectual beings, then we say that those on whose tables pork is most frequently found, are the least intelligent and most groveling in their views. We know distinctly the full bearings of what we utter, and precisely how it will be received, nor do we care a farthing for the anathemas that will be hurled at us for the assertion. The potatoe has done more to demoralize and debase Ireland and keep the inhabitants under a vile and designing priesthood, than all the extravagance of monarchy and the harlotry of the English Church. Nor would the poor Irish wretches seek heaven in the whiskey-bottle and at the confessional, if their miserable bodies were not exhausted of organic force by an unnutricious root, which requires nothing but a pair of hands to claw it from the earth, a few bits of peat to cook it, and the hard earth of the cabin, foul and damp with human filth, and often shared as a lodging room with the foul animal we speak of, as a family board.—Dr. Pereira ranks it at only one-tenth the nourishment of meat! What motive remains for his elevation, if a human being is taught to look no higher than such a repast for the nourishment of his body, and to the nearest priest for the welfare of his soul? Now compare this fairly with the slave and his hog and ash-cake, and the poor farmer, such as we have often seen at the family meal—ay, as you may now find him all over our country, with his salt hog, potatoes, and sour rye bread, and his miserable husbandry, and thousand excuses for not raising sheep, protecting and feeding his cattle, and changing and cultivating his fowls and seeds, and attending carefully to a good vegetable garden. You need make but small search for his pig pen, his foul barn yard, his whiskey-bottle, and tobacco-box, or his nauseous pipe. He will largely defend his beloved porkers, his system (!) of husbandry and his favorite luxuries; the hog is his grand exemplar of manners and physiologies, his omnivorous animal laboratory that converts the produce of his farm into his great staple—pork. Poor Sir Walter Raleigh, we have often shed a tear for your sad fate; but our wicked fancy has often pictured ye making an offering to the devil of a hog stuffed with tobacco. The devils, we think, selected a very appropriate lodgment when they besought the Saviour to send them into the hogs; it is a great pity that the entire family of swine were not comprised by that same two thousand; we should have thanked Heaven for their devotion to hydropathy.—*Scalpel.*

# EDITORIAL AND MISCELLANEOUS.

## The Third Volume.

AT the commencement of the Third Volume of our Journal, we must be permitted to express our gratification at the position which it occupies, as evinced in the most unequivocal manner from various sources. We do not refer to this matter with any view of boasting or lauding our own labors—it is true, however, that a large amount of time and labor which, in a pecuniary point of view, might have been more profitably employed, has been expended upon it—but the object is to express our gratitude to those who have appreciated our labors, and encouraged us continually by kind words, and it is especially an object to make the acknowledgement of obligations due our collaborators, who have of course mainly contributed to the establishment of the Journal upon its present gratifying basis.

In this connection, we would remark that though, as stated in the last number of our Journal, it has changed hands, (so far as its *publication* is concerned, the *editorial* connection remaining the same,) it is with no diminished interest in its success that we again present its claims to the profession. We are assured that at present it exhibits regularly not only a large amount of valuable original matter, from the medical men of the South, a considerable portion of which will compare favorably with the contributions of any Journal in the United States: but we have no hesitation in asserting that with this Journal alone, medical men would not be kept in ignorance of the medical progress of the day; our object being (in which we think there has not been an entire failure) to present a synopsis of medical advance.

Having no direct pecuniary interest in the publication, we have less hesitation in urging our friends, and the friends of Southern medicine particularly, to increase their exertions to extend its circulation, assuring them that in proportion to the patronage and support given, will be the effort to increase its interest and value.

## American Medical Association and Medical Education.

We have already said so much upon this subject that it has become wearisome, even to us, and we fear much more so to our readers, and yet we hope they will pardon us for a few additional remarks, suggested by some of the singular positions, assumed in reference to this matter.

The New Orleans Medical News and Hospital Gazette asks, "Is this Association is a representation of the medical schools of the land; or is it a National Congress of the "people," of the profession?" and says, in *partial* reply to its own question, "no man will deny that it *purports* to be the latter," and there lies the difficulty, which we suggested in the last number of this Journal; it *purports* to be what it is not in reality, and, as suggested upon a former occasion, cannot in the very nature of things become. The "people" of the profession, we say, never have been represented, and while they should be, to accomplish the objects which are supposed by some to belong legitimately to it, the notorious fact is, that it has been controlled by a comparatively few of the profession, some of the most prominent of whom are connected with Medical Colleges, and have not hesitated to use it for their own advancement, and have yet hope of making it minister still farther to the accomplishment of their selfish designs.

The truth upon this subject is, that the mass of the profession have never been aroused to an interest in this body, and even if its workings and results were entirely unobjectionable, the vast country and varying circumstances, embraced in the area, over which it is proposed that it should exercise "control," would render the attempt utterly futile. You cannot get the "*people*" of the profession to send representatives, and its management is left to a few prominent, and, in many instances, self-important members of the profession, who occupy the more conspicuous positions.

We know whereof we speak, from an observation of the practical workings of this body; we *know* that instrumentalities for the accomplishment of certain ends not entirely creditable, even to political bodies, are brought into operation, the details of which are well calculated to disgust those who have really looked to the Association for the advancement of science, rather than of individuals, and furnish a sufficient explanation of the meagre attendance at the last meeting.

We go still further, and assert it as our belief, that so far from the controlling influence in the association being of a *popular* character, (in a professional sense of course,) it has belonged to the Colleges, and was most strikingly manifested at the last meeting of the Association, and desiring, as we do, most earnestly, the establishment of the body upon a permanent basis, we go in heartily for the exclusion of the Schools from representation, and agree with the sentiment that "the representative of a medical society can scarcely feel comfortable in his seat when he reflects that the highest honors of the Association is each year sure to be conferred on one whom he believes to be sapping the foundation of the Association, and that a School of seven men is entitled to a more numerous relative representation, by far, than even the State Medical Society, from which he may bring his credentials; much less can he even dream of "advancement," "harmony" and "the matter of reports." This is all our doctrine and an approval of our position—that as at present constituted, the American Medical Association *cannot and should not "control"* the American Medical *profession.*

We are and expect to be a supporter of this body, for legitimate and proper ends, but in reference to this, as other organizations of a *so-called National character,* we must be permitted to exercise great caution. The day is indeed past, when we were willing to commit our rights, whether political, religious, or of other kinds, into the hands of National organizations.

We are an advocate, however, for the elevation of the standard of Medical education, and shall give our feeble support to any means calculated, in our judgment, or in the judgment of the profession generally, to effect the end.

We shall, however, continue to protest against the use of the American Medical Association, as an instrument, in the hands of any College or set of Colleges, for the purpose of bringing others into disrepute, which in plain terms, we consider to be the sum and substance of the present movement upon this subject. The truth is, the simple and practical plan, under existing circumstances, is to leave the whole question to the Colleges and the "masses" of the profession. Let each institution be brought into a competition for offering the best advantages, and let these dear "people" of the profession settle the question of merit, by their support or otherwise—this is the plain common sense way of settling the whole question.

"*The late Meeting of the American Medical Association at Nashville.*—The meeting of this body in May last at the capital of Tennessee, presents several points for comment. In the first place, we had hoped, after what had been said by our esteemed cotemporary, the Nashville Journal of Medicine and Surgery, that the medical profession of Nashville would have declined to enter the arena for the office of President of the Association, on the ground that the practice of conferring that post upon a physician, resident at the place where the meeting is held, ought to be abolished. The reasons urged by the Nashville Journal and several similar publications, were cogent and full of point, and yet, notwithstanding this, one of the very editors of that periodical allowed himself to be nominated for the office. We mean no disrespect to the distinguished gentleman, when we say that we regret this step, because many of the opponents of the custom, which would certainly be more honored in the breach than in the observance, had reason to believe that it would have been abandoned. It is no honor to a man to be elected to office under such circumstances. It is a concession to the place; or in other words, to good eating and good cheer. We believe there is no other body of a similar kind in this country, among whom a similar custom prevails. The Moderator of the General Assembly of the Presbyterian Church, is seldom, if ever, selected from the clergy of the place where its meetings are held.

Secondly, the American Medical Profession and the American people at large, had a right to expect, after the adoption, by an almost unanimous vote, of the resolution at St. Louis, in 1854, that the custom which, up to that period, had existed, of entertaining the profession with an expensive feast, would not have been revived at the capital of Tennessee. We are told, it is true, that the Profession had no participation in the expense of the ball and supper, but that they were gotten up and paid for by the citizens of Nashville. Would it have been wrong in the Profession of Nashville to have said to their fellow-citizens, that there was a resolution upon the minutes of the proceedings of the Association, declaring that all public displays of this kind should henceforth form no part of the *transactions* of that body?

Thirdly, the meeting was a meagre one, both in respect to the number of its attendants, and in the value and importance of its transactions. Hardly any reports were presented; in almost every instance the chairmen of the different committees asked for further time. This is not as it should be. The Association, to carry out the right principles, with which it originally set out, should be more of a working and less of a pleasure-seeking body. The committees should make it their duty to discharge, with promptness and fidelity, the trust confided to them. It is a bad example to hear so many of them say that they are "not ready to report;" an example which is apt to become infectious, and to lead ultimately to the most prejudicial results. We should wake up upon this subject. To make the Association what it should be we must work more, talk less, and use a lighter diet. Moreover, the meetings should extend at least over one entire week. It is folly to think that any important business can be transacted in two or three days, by a body so large and unwieldy as this. Besides, the thing is absolutely undignified. As the matter now stands, we literally meet only to adjourn.—*N. A. Medico-Chirurgical Review.*

Upon the above we have to say, that it was our full and distinct understanding, that in the language of the journal from which the above is taken, "the medical profession of Nashville would decline to enter the arena for the office of President of the Association, on the ground that the practice of conferring that post upon a physician, resident at the place where the meeting is held, ought to be abolished."

In view especially of the declarations of the Nashville Journal, it can not be considered strange if there has been a very general disappointment (suppressed in *expression* though it has been,) in reference to this matter, in connection with which there is an *unwritten* history of "transactions" of a most remarkable character, and we cannot say in the highest possible degree creditable to all concerned.

## Close of the Session.

The third session of the Atlanta Medical College will close on the 3d of September, with 124 Matriculates, a very respectable increase upon the *number* of the last session, but we have no hesitation in saying that in this has been much the smallest advance in the standing and influence of the institution. The high object which has been continually held in view by the Faculty from the commencement, to furnish facilities of the first order, and to build up an institution inferior to none, is beginning to be realized and extensively acknowledged.

While the Faculty have submitted to great sacrifices to accomplish this success which, they have no hesitation in asserting, has been of greater benefit to others than themselves, they only ask the *most simple justice* in the way of a fostering interest upon the part of the city and the State in which the institution is located, to enable them to present advantages which will command a patronage from every Southern State, some six or seven of which are represented in the present class.

*Fiske Medical Prize.*—We notice in the Cincinnati Medical Observer, that the Trustees of the Fiske Fund, at the annual meeting of the Rhode Island Medical Society, held at Providence, June 3, 1857, awarded the premium of $100 to David Hutchinson, M. D., of Moorsville, Morgan county, Indiana.

The following subjects are proposed for 1858: 1st. "The effects of the use of Alcoholic liquors on tubucular disease, or in constitutions predisposed to such disease," to be supported by facts presented as far as possible in a statistical form.

2d. "The morbid effects of retention in the blood of the elements of the urinary secretions.

For the best dissertation on each of these subjects, the trustees will pay $100.

*Gelseminum Sempervirens in Gonorrhœa.*—Dr. John Douglass thus concludes a letter published in the Charleston Medical Journal and Review: "About thirty years ago I was called on in my office, by a young man who had been suffering several months with improperly treated Gonorrhœa. One of my pupils begged me to give the case to him, observing that he could cure the most obstinate case in a few days, with the root of Yellow Jessamine. A small hand-full of the root was put into a junk bottle of whiskey, and the patient ordered, in a day or two, to take a table-spoon-full of this tincture night and morning. He took but four doses before he became much alarmed, and called on me, stating that the medicine had destroyed his vision. The symptoms he described correspond precisely with those mentioned by Dr. M. Every symptom of Gonorrhœa had disappeared, and the cure was permanent. Since that time I have treated many cases of the same character in a similar manner, with uniform and speedy success."

*New York State Lunatic Asylum.*—The late destruction of this spacious edifice by fire is indeed a public calamity. The extraordinary fact that of the hundreds of its patients, all were saved is the only redeeming feature of the startling intelligence. Yet even this result, it would seem, was only attained by the sacrifice of one of its physicians, Dr. Rose, who perished from the injuries he received at the fire. Another martyr to professional fidelity.—*American Med. Gazette.*

*Consolidation of Medical Schools.*—The Miami Medical College and Medical College of Ohio, have been consolidated under the name &c. of the latter. Professors Judkins, Comegys, Foote and Mendenhall, of the Miami, go to the Ohio School; Professors Armor, Marshall, Varder and Foote, of the same, retiring.

*Ergot in Menorrhagia.*—Dr. J. McF. Gaston, in an article in the New Hampshire Journal of Medicine, recommends ergot as the most efficient remedy in menorrhagia. He combines with it iron, opium, or valerian, as circumstances require.

*Preservation of Vaccine Virus:*—A Chicago correspondent of the Peninsular Journal of Medicine, says: "Dr. Johnson read a paper on the use of Glycerine for preserving animal organic cells. He stated that Dr. Andrews, of this city, had made experiments in the preservation of vaccine virus by solution in glycerine, using the solution instead of the solid matter for vaccination, and that by this means the difficult problem of how to preserve the virus in an active state was admirably solved. Dr. Johnson has repeated the experiments of Dr. Andrews with success. He had also examined the solution with the microscope and found the cells perfectly preserved."

"In Dr. Andrews' experiments, the vaccine matter was kept in solution two or three months of warm weather, at the end of which time seven cases were vaccinated with it without a single failure. If this preparation shall prove, as it now seems to promise, to be a permanent form of the virus, it will be of great advantage. The scab broken into three or four pieces is thrown into a little glycerine and occasionally shaken. It will slowly dissolve without any farther care, and almost any number of persons may be vaccinated from the solution, every new scab the practitioner gets may be dropped into the same vial, and thus he will never find himself destitute, as is now the case, by the loss of the active powers of his crusts."

*Singular Case of Lactation.*—A few days since, my attention was called, by a friend, to an old woman who was suckling her grand child. Seven years ago I delivered her of her of last child, which died a few weeks after, and, in womans' parlance, her milk soon dried up. Last Christmas her eldest daughter died, leaving an infant which fell to her charge. As she stated to me, at night the child would take the nipple in its mouth, until she actually began to give an abundant supply of milk, after an interval of more than six years of non-lactation. Any one who has curiosity about the matter, can see this singular case, by going to the kitchen of the late Russell Dudley, diagonally opposite the United States Hotel. —Thomas Johnson, in Virginia Medical Journal.—*Boston Medical Journal.*

*Iodide of Calomel.*—In the British and Foreign Medico-Chirurgical Review, we find the Iodide of Calomel recommended as an effectual remedy for engorged and ulcerated conditions of the neck of the uterus. It is applied by means of a pledget in the form of a pommade. "In the days succeeding the dressing, the exuded coagulum is detached by degrees, the volume of the os uteri diminishes, and becomes less than it was before the topical application; if there was any induration, which is generally the case, this induration is much less from the day succeeding the dressing. At the end of eight, ten, or twelve days, if this amelioration has made no progress, the dressing is renewed, and gives rise to the same phenomena, although in a less marked degree; and after two, three, four or five applications made at the same intervals, the os is usually restored to its normal volume, and the ulcerations are cicatrized."—*Recommended by Dr. Rochard in the L' Union Medicale, January 6th*, 1857.

*Dysentery.*—Dr. J. L. Abernethy, in an article in the Southern Journal of Medical and Physical Sciences, contends that the inflammation of dysentery is not common but specific in its character. The chief reasons adduced for the opinion, is that it has a special locality, viz: the signoid flexure of the color and vicinity; that it prevails epidemically or endemically at certain seasons; that the disease present quite a different lesion from that observed in gastritis, enteritis, &c., and does not yield to treatment ordinarily adapted to inflammation.

*Interesting to Physicians.*—The Supreme Court of the Eighth Judicial District of New York, has decided that the action of the Erie County Medical Society, in expelling Dr. John D. Hill, for taking the office of physician to the county almshouse, at a rate less than the price fixed by their tariff, was illegal, and Dr. Hill must be restored to the privileges of Membership. The Court decided that the tariff of prices was unauthorized, and contrary to public policy and law.—*Western Lancet.*

*Electricity in the Suppression of the Lactial Secretion.*—M. Bicqurel, in a late communication to the *Société Médicale des Hôpitax de Paris*, has made some remarks upon the influence of electricity in restoring the secretion of milk. His attention was called to the subject by a case related to him by M. Aubert, who had employed electricity in the case of a young woman, whose milk had been suppressed in consequence of a double pneumonia. The electricity was applied to the breast by means of moist excitors, and after four applications, each lasting twenty minutes, the lactial secretion was completely restored—*British and Foreign Medico-Chirurgical Review.*

*Ergotine in Epidemic Diarrhœa, by M. Massola* (*Gaz. Hebdom de Med. et Chir.*)—In a communication to the Academy of Medicine in Paris, M. Massola states that he found great benefit from the use of ergotine in the fatal epidemic diarrhœa, which prevailed so extensively among the Sardinian troops, in the recent Campaign in the Crimea. From fifteen to twenty grains were added to ℥viii of water, and a table-spoonfull of this mixture was given every half hour. M. Massola states that astringents, tonics, opiates or stimuli, were of little avail as compared with the ergotine.—*Half Yearly Abstract of the Medical Sciences.*

*Arsenic and Stillingia in Diseases of the Skin.*—In the Boston Medical and Surgical Journal, we find in a communication from Wm. M. Cornell, M. D., of Boston, Sillingia recommended in cutanious diseases, and in secondary and tertiary syphilis. In cutanious diseases he thinks is decidedly preferable, and less dangerous than arsenic. The article closes with the following quotation from Dr. Williams: If we can safely spare our patients the infliction of heoric remedies, from the effects of which they may be months in recovering, we confer a great benefit on them, and obtain another triumph for our profession.

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## METEOROLOGICAL OBSERVATIONS FOR AUGUST, 1857, AT ATLANTA, GA.

| AUGUST. | THERMOMETER. | | | BAROMETER. | | | WIND. | REMARKS. |
|---|---|---|---|---|---|---|---|---|
| | 7 A. M. | 2 P. M. | 7 P. M. | 7 A. M. | 2 P. M. | 7 P. M. | | |
| 1 | 71 | 80 | 77 | 30. | 30. | 30. | S. | Cloudy—Rain 1. |
| 2 | 72 | 80 | 72 | 30. | 30. | 30. | S. | Cloudy—Rain ¼. |
| 3 | 70 | 76 | 72 | 30. | 30.05 | 30.05 | S. W. | Cloudy—Rain ⅞. |
| 4 | 72 | 70 | 70 | 30.07 | 30.07 | 30.07 | S. W. | Cloudy—Rain ½. |
| 5 | 74 | 84 | 78 | 30. | 30. | 30. | S. W. | Hazy. |
| 6 | 70 | 86 | 72 | 30. | 30.05 | 30.05 | W. | Fair. |
| 7 | 70 | 88 | 78 | 30.10 | 30.15 | 30.20 | E. | Hazy. |
| 8 | 72 | 84 | 78 | 30.25 | 30.25 | 30.27 | E. | Hazy. |
| 9 | 66 | 86 | 80 | 30.17 | 30.20 | 30.12 | N. E. | Fair. |
| 10 | 62 | 84 | 72 | 30.05 | 30. | 29.95 | E. | Fair. |
| 11 | 74 | 84 | 76 | 30. | 30. | 30.05 | S. W. | Cloudy—Rain ¼. |
| 12 | 72 | 90 | 78 | 30.15 | 30.20 | 30.20 | W. | Hazy. |
| 13 | 72 | 90 | 90 | 30.25 | 30.22 | 30.27 | S. W. | Fair. |
| 14 | 82 | 92 | 80 | 30.30 | 30.27 | 30.27 | W. | Fair. |
| 15 | 86 | 94 | 84 | 30.25 | 30.20 | 30.15 | W. | Fair. |
| 16 | 86 | 94 | 90 | 30.25 | 30.25 | 30.20 | W. | Fair. |
| 17 | 78 | 92 | 88 | 30.22 | 30.25 | 30.17 | W. | Fair. |
| 18 | 78 | 92 | 87 | 30.20 | 30.20 | 30.12 | W. | Fair. |
| 19 | 76 | 84 | 70 | 30.12 | 30.10 | 30.07 | S. W. | Cloudy—Rain ⅛. |
| 20 | 66 | 78 | 66 | 30.10 | 30.10 | 30.10 | E. | Cloudy. |
| 21 | 64 | 78 | 66 | 30.12 | 30.12 | 30.10 | N. W. | Fair. |
| 22 | 64 | 88 | 70 | 30.05 | 30. | 30. | W. | Hazy. |
| 23 | 66 | 82 | 70 | 30.02 | 30.02 | 30. | N. | Fair. |
| 24 | 60 | 80 | 74 | 30. | 30.15 | 30.15 | N W. | Fair. |
| 25 | 64 | 76 | 70 | 30.20 | 30.25 | 30.25 | N. | Hazy. |
| 26 | 80 | 86 | 80 | 30.27 | 30.15 | 30.15 | W. | Cloudy—Rain ¼. |
| 27 | 72 | 86 | 80 | 30.10 | 30.10 | 30.05 | S. | Hazy. |
| 28 | 74 | 86 | 78 | 30.05 | 30. | 30. | S. W. | Fair. |
| 29 | 58 | 62 | 70 | 30. | 30.12 | 30. | S. W. | Fair. |
| 30 | 58 | 78 | 68 | 30.05 | 30.15 | 30.15 | W. | Fair. |
| 31 | 64 | 82 | 74 | 30.15 | 30.25 | 30.20 | W. | Fair. |

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# ORIGINAL COMMUNICATIONS.

## ARTICLE I.

*Valedictory Address to the Graduating Class in the Atlanta Medical College.* By THOS. S. POWELL, M. D., of Sparta, Geo.

GENTLEMEN OF THE GRADUATING CLASS
OF THE ATLANTA MEDICAL COLLEGE:

To you this is a most interesting and momentous occasion, well calculated to excite in the bosom of each one of you mingled feelings of hope and fear. It is the "commencement" of your Alma Mater, which ends your collegiate career, and opens to you a new life. The dreams of youth are now to be succeeded by the realities of manhood. This hour's ceremony will transform you from the pupil to the teacher. It will transfer you from the class and from association with the taught, to the society and position of the learned. Soon you must bid adieu to each other and to kind preceptors, to enter on the vast and untried ocean of actual life to battle for yourselves. Here you are now about to embark on that mysterious ocean, which he alone can navigate successfully who has the requisite skill to avoid rocks upon the one side and whirlpools on the other. No wonder, then, that on such an occasion emotions opposite and conflicting mingle in the bosom of those personally interested. Far be it from me, however, in the present address, to repress your buoyant hopes, or darken your bright anticipations of success; but I feel that I would not faithfully discharge the duty which the kindly confidence of your preceptors has required at my hands, the duty of offering the last counsel which, as a class, you will receive, if I did not tell you that this calm sea which lies so invitingly before you, and on which you are soon to launch your bark, has concealed beneath its waves dangerous rocks; and I tell you, too, to shun them, will depend upon the cool and wise caution with which you will steer your course. Error in judgment with the helmsman of a vessel, or in the conduct of the captain, will prove ruinous to its interest and often disastrous to its crew. So it is with the physician, who acts the part of both; hence, you see the importance of being properly qualified to discharge all of your duties, and surmount the difficulties that await you, if you desire to steer safely over this impetuous stream upon which you are to launch to-day, and ultimately sit upon the summit of usefulness and renown, and descend to the tomb "full of years and full of honor."

It is not my intention to lecture you on the present occasion upon the history of medicine, the advantages or disadvantages of the various theories that have sprung from the broad plain of philosophical research, or from the wide fields of medical speculation. That office has been spared me by those to whom you have listened for the last four months; and in whatever they may have failed to instruct you, for want of time, I refer you to the inexhaustible sources of knowledge to be found in the standard books of the profession. They furnish sources for acquisition in all its departments of learning far more accurate and lucid than any dissertation comprised in the condensed form of an address. Nor is it my object, young gentlemen, in standing before you and this brilliant assemblage of talent and worth, to exhibit boquets gathered from the garden of literature. Far from it; my object is not to gain laurels for myself, but to do you good. And I trust, as my effort must be prepared amid the avocations of a professional life, affording few hours of leisure for such pursuits, will be appreciated and command your approval, or at least a mitigation of your critical severity; for I feel that I speak the truth when I say that no one feels a deeper interest in the prosperity and elevation of the profession than I do—a prosperity in which I trust you may participate—and an elevation which I trust each of you may be instrumental in aiding to achieve.

The topic to which your attention is solicited for a few moments, is the moral and professional duties of the Doctor, with a few suggestive remarks upon one of the great obstacles to his usefulness and success. The science of medicine is peculiar and diversified in its character, differing materially from all others. In its theory and practice it is vast and varied, embracing all the elements of art and science. Unlike Law and Theology, which seek but one element of man's happiness, it includes the province of these and every other science, so that in its principles and practice it comprehends in one vast field the physical, moral and social welfare of the human race. Man's whole moral and material organism—soul, body and mind—are embraced in this varied, beautiful and comprehensive science. The subject, therefore, is of great interest to you, and a matter of vital importance to society at large; to every individual in the country, from the man in the most exalted position in life, to the most humble artisan in the land. Is it not so? most assuredly it is. The public could not do without you if it wished. Then, if this be so, gentlemen, oh how much of the happiness and safety of your fellow-creature depends on your perfectly understanding your varied, arduous and responsible duties.

In order that I may more clearly present the subject to your mind, I propose very briefly to speak of it under two heads—

1st. *The moral duties of the Doctor:* By moral duties, I mean the duties which, on account of his most frequent intercourse with all conditions of society, are frequently required at his hands—duties which are required of him as a citizen and a man, because his duty as a physician has placed him first in the breach where these duties are most required; yet, all men, emmbers of society, are under like obligations.

2d. *The Professional Duties:* When I speak of the Doctor, I mean an educated, learned man, as the word originally meant; one whose intellectual faculties have been developed, disciplined and enlarged. The duties of such a man to society, I desire profitably to depict to you. That mind is power, that superior intellect is inherently powerful, and influential for good or evil, is a truism, and needs no argument to prove. That the doctor is a man, and that man is not only an individual, but a member of society, will also not be denied. That he was not made a "living soul," to idle and dream away his life, however harmless and inoffensive it may be, but to devote the energies of his mind and the virtues of his heart to the discovery and extension of human happiness and knowledge, is authenticated by Holy Writ, and cannot be denied. That individuals depend upon society for protection and security, and society depends upon its component parts for its own stability and happiness, is also acknowledged by all in this age of moral and scientific improvement; therefore, every man has duties to society, to his fellow-creatures, and to his country to perform, and the importance and magnitude of these duties, and the consequent binding obligation to discharge them, greatly depends upon his intellectual progress, and the general condition of the country in which he resides. This will not be contravened, we presume, by any one; nor will it be denied that the position which the doctor occupies in society generally, is one of commanding influence. They are generally educated and intelligent; their pursuits are such as bring them into intercourse with all classes. Speaking as one of the public: we are compelled to take you into our confidence, and often open to you the most secret recesses of our hearts; we tell you what we would disclose to no one else on earth; we pour into your ear accents of anguish almost unutterable. You are, in truth, the true benefactors of the land. Yes, you belong to the true aristocracy, if such a term is applicable to any who live under a republican government. We do not use it in an offensive or braggadocia sense, but we repeat, you are the true aristocracy, that of intellect. You can, to a very great extent, control the morals of the country. Your vocation brings you to a knowledge of the great sources of vice and crime, and all the thousand and one evils that afflict society, and stand in the way of social progress, of individuals and national prosperity. Thus, you see, you are armed with power really formidable for good or evil. You may serve and bless, exalt and depress, reclaim or corrupt. You may often allay and check deeds of violence; sooth down the spirit of party, and strengthen the bands ot social intercourse. Are these outlines of your influence overdrawn? is there any exaggeration tending to inflate you with a false sense of the importance of your position and duties, or to discourage you by a disheartening fear that you are not and cannot become sufficient for the task? Here, young gentlemen, are sitting before you, your professors, the heads of the profession; there are also present some of the most distinguished of the legal profession, who belong to the same aristocracy, and whose duties, responsibilities and field for usefulness, are very much the same. I ask them, am I overstating the case? I imagine I hear them say No. Well, then, if this be so, oh what a responsible, noble, heaven-born profession you have entered, demanding the constant exercise of all your energies in the relief of misery, suppression of vice, and the promotion of virtue. You will thus perceive that you have a great influence, and that no one can deprive you of it; that as educated men you will have with you at all times a tremendous engine of power; hence, you will also see the importance for the good of society and your own happiness, both in time and eternity, that it should be exerted in that way that will accomplish the greatest amount ot good. Remember, gentlemen, the great amount of good which you can be the means ot affecting in your daily walk and practice of your profession. Your education, your position, your profession arms you with power for good or evil, which is wonderful and even fearful to contemplate. It is a principle in the moral government of the world, that a good or an evil deed may have no end in its influence on time and eternity; and that also this influence, according to its nature "for good or evil," goes on progressively increasing and widening throughout eternal duration. Hence, a deed of charity, however small, a kind word or gentle reproof spoken in season, may result in good, and that good begets other good, which acts on some other mind, and that mind may act for good on a thousand other minds; so, the good influence is going on multiplying, widening and increasing throughout all this great and mysterious net-work of creation; and thus, a good word, or one good act, trifling in appearance, may go on through time, extending in its influence, until every human being under the sun shall feel its effects; until every nation and tongue and kindred in time and eternity shall rejoice in its multiplied blessings. Eternity will reveal to our astonished vision what the world has suffered by our neglect of one good act, or the commission of one bad deed. It will unfold, too, before the gaze of an assembled universe the tremendous, and glorious, and eternal good which has resulted from the smallest and most insignificant action in life.

Hence, gentlemen, in this solemn and awful view of the subject, you can appreciate more fully the fearful responsibility that rests upon you, and the importance of wielding all your mighty power for good and glorious ends. Then go forth determined not to neglect the smallest act of kindness or of duty. Go forth on the great field of your labors, with a heart to feel and a soul to sympathize, and a hand to give among all the poor and afflicted of the human race. Do this, and you will achieve your own fame in the undying blessings of your fellow men. You will show forth the glory of God, and carry with you to the great day of final reckoning a reward whose glory and bliss eternity alone will reveal.

If I have succeeded in impressing your minds with the truth that the educated man is powerful in his influence, particularly when his vocation, like yours, brings him in constant contact with many who are less favored, my first object has been accomplished.

I will now proceed to speak briefly of what I conceive to be some of the moral duties of the doctor. I have said that the physician had to mix and mingle with all classes and grades of society; therefore, it is a moral duty you owe to yourselves and to society, that you continue to study, to cultivate and fill your minds with useful knowledge. You should recollect that your education is not completed, but just begun, simply a good foundation, on which you alone, by incessant study and toil, must erect the superstructure. There is no bounds to knowledge; hence, the necessity of pursuing it industriously by study. The more knowledge you acquire the more you will desire, and the larger will be the sphere of your influence and usefulness.

This is an age of science and progress in everything that can enlighten the conscience, and shed light upon the understanding, and give vigor and power to the mind; therefore, if you would become what you should be, and what you will be expected, (a leader in society,) you must study, study everything, all the known sciences, physical and moral; also, the science of human nature.

This is your moral duty, because it is one of your first duties to prepare for exercising the greatest amount of influence for the happiness, advancement and prosperity of society.

This great end can only be accomplished by the united powers which legitimately belong to a highly cultivated mind and morals. Away, then, with the false idea that the physician cannot and ought not to be a man of letters. It is slander circulated by envious, sneering charlatans, who have entered the profession for the emoluments alone, because they were incapable of making a livelihood in any other respectable way, who are willing to creep into and all through their profession like a mere beetle, content to be mere "hewers of wood and drawers of water;" skilful enough when they learn to apply a few general remedies, according to special directions, without being able to command scarcely any resource of a literary character. If, then, young gentlemen, you desire to be what God intended you should be, "the highest style of man"—if you wish to follow the example of your divine exemplar, who went about doing good, healing the sick, relieving the distressed, and comforting the poor. You must not be content with being well versed in those sciences strictly medical, or those that have a direct bearing upon medicine; but you should as far as your time will permit, acquaint yourselves, with the general principles of every branch of science and literature.

The mind, like the body, not only requires strength for usefulness, but decoration for effect. The human mind may be naturally great and gifted; it may be richly stored with all the principles of science; in all its natural powers it may in the study of great truths, grow up to a giant strength; yet, if it is void of those pleasing ornaments which charm and attract the world, it is less powerful for the performance of good deeds and the achievement of great ends. The mighty Sampson, when shorn of his flowing locks, could not resist an infant's arms. So the most giant intellect, destitute of its mental charms and moral beauties, is quite powerless for victory before the Philistines of ignorance and the host of darkness. To be useful and effective for good, the mind must be not only powerful in strength fully developed, but clothed in those polished charms of decorated beauty which please and captivate the world. Indeed, we see this principle of blending the useful with the ornamental, running harmoniously through the whole economy of nature. There is nothing in the natural universe which does not teach this principle. The great globe in its massive strength, is decorated with living green and flowers of every hue. The mighty ocean, whose heaving bosom bears up the navies of the world, presents its mountain billows, its crested waves, its silvery surface to the enchanted eye. The storm-cloud, before whose fury the mighty forest bows, roars in its thunders wild, and revels in its lightning flash. The great heavens has spread her blue canopy over us, bespangled with ten thousand stars, shining with the light of distant worlds. Thus does all nature, in performing her great designs for the happiness of man, blend in one beautiful whole the useful and the ornamental, the beautiful and sublime. Thus, you see, it is your moral duty never to imagine that you have exhausted the fountain of knowledge; that you can recline yourselves on beds of indolence and ease, but you must trim the midnight lamp, and continue to drink deeper and deeper of the Pierian spring. To press on, until you have adorned your name and character with that true wisdom and knowledge which shall make you at once an ornament to your profession and a blessing to mankind. A life of study lies before you, and you must enter on it with cheerfulness and decision if you would aspire to real greatness. Distinguished men made so by application, are far more numerous than distinguished men made so by genius.

The influence which you exert on public sentiment is not only by the power of your superior intellect, but by the opinions you utter and examples you set; therefore, it is your moral duty not to indulge in giving utterance to sentiments, which would encourage vice and immorality; but, on the other hand, your conversation in your daily intercourse with your fellow man should be characterized by sentiments of pure morality, and your example should be of the most elevating character, such as would evince great proof beyond the shadow of a doubt, that your judgment and your affections are all enlisted in behalf of right and virtue. You should identify yourselves with the refined, the intellectual and the benevolent, and thus take the proud position to which your education and your profession entitle you. To such a doctor too many thanks can never be given. The value of such a doctor for the public weal can never be estimated by any finite mind. And there might probably be more of such physicians, but for the false and degrading doctrine that the doctor must take no part, in any public or private scheme; or, in other words, he must do nothing but visit his patients punctually, dose them well, charge them less, and live only for selfish ends. How absurd. This is true of no one, much less is it true of the learned, the educated and the refined doctor, who has so many opportunities of doing good and in so many ways. Then let me beg of you never to allow such unphilosophical and unscriptural views to interrupt you in the discharge of your moral duties. Not only as one of the leaders of society, but as an intelligent citizen, you may rest assured that in every good enterprise God will be on your side, and success will be yours. The moral duties of the doctor, are too numerous for all to be presented in a short address. Indeed, it would be necessary in the most elaborate discussion, to select a few of the most important, and even then much would remain unsaid; but if it was all said, and well analyzed and sifted, it would amount to about this—continue to cultivate your intellect and the moral regulations of your heart, by studying everything that would strengthen, enlighten, and adorn the mind, elevate the standard of morality and virtue; always be ready to promote and encourage virtue and suppress vice; always be willing to aid in carrying out glorious plans for the public good, based on the mighty and immutable rock of christianity.

This, young gentlemen, brings me to the second head of my subject—your professional duties. Some of you may be ready to exclaim, as it has been by Dr. Samuel Johnson, that they are limited, consisting merely in a melancholy attendance on misery; "a mere submission to peevishness and continual interruption of pleasure." If so, you enter your profession with inadequate or unworthy views. You have only to consult your hearts to be convinced of this. The proof is to be found in the main object of your profession, which is to add to man's happiness by healing him in sickness, and comforting him in affliction. To carry out these objects, you will perceive it involves much. A vast field is open before you, so wide and extended, it will be impossible for me, without occupying more time than prudence would dictate, to do more than take a rapid and cursory view of a few of the most important divisions of the subject, as laid down in the code of medical ethics, adopted by the American Medical Association.

First, your duties to the public—your patients. It is your duty to make yourselves thoroughly acquainted with every branch of your profession. I am willing to admit that many, by simply learning to answer a few general questions in Anatomy and Physiology, and how to apply a few general remedies, may do some good and acquire quite a reputation, particularly if they are adroit in intrigue, as it is said of some of the political demagogues, and can draw to their aid, for the purpose of getting practice, the influence of personal friends, the wealth of relatives, or prejudices founded on political sympathies. But to be a skilful and safe general practitioner, you must have a good knowledge of the structure and functions of every organ of the body. You must know them in health and disease. You must know the causes which derange and disease these organs; and, to do this, you must make yourselves thoroughly acquainted with Anatomy, Physiology, and, in fact, every branch of your profession. This is a duty you owe to the public and your patients. At times of great moment when, there will be no time nor opportunity for inquiring into your competency, you will be sent for, and must act with no other evidence to society, that they can employ you with safety, but the "indicia" of your calling which hangs and glitters over your door. Thus you perceive, young gentlemen, your first professional duty is to study your profession, understand it, keep pace with its improvements, be at all times ready to give to the afflicted all the benefits and advantages that it affords. It is also your duty to be ever ready to obey punctually the calls of the sick. You should be humane, benevolent, gentle and kind to all, but especially to the poor, who have no worldly means of remunerating you for your professional services. Shun the base example of some physicians who, in the hour of deep distress, turn their backs on the afflicted poor, to visit and court the influence of the rich nabob, with his cattle upon a thousand hills. Shun the example of him who attempts to drag down your noble profession from its high moral province to make it one of mere dollars and cents; "who heeds not the cry of the widow and the wail of the orphan," because the glisten of gold does not allure him to their lowly hut. Remember, that to comfort and heal the afflicted part of our fallen race is your highest and noblest duty; remember, too, that when you have thus healed and comforted the poor, your reward is rich on earth, yet far richer in heaven. The pearly tear of gratitude that steals its way down the poor afflicted beggar's cheek, is worth more to you than the brightest gems which sparkle in the starry crown of king or emperor. They will be treasures laid up for yourselves in that brighter and better world, where sickness and sorrow are felt and feared no more. Remember, then, young brethren, that your services (if rendered with the proper spirit) to that class of the human family that the Saviour of the world said we would have with us always, will not be lost, but will be to you the brightest recollections in the history of your life, especially in the hour of death.

You will have to bear much from the ignorance and frailties of others, but for your own and their good, you should keep a constant watch over your tempers, and exercise patience and charity towards them, remembering that the human body is not a piece of senseless machinery, and how seriously their interest may be effected by what you say or do. It is therefore, your duty to avoid all things which have a tendency to discourage your patients or depress their spirits. For your good and the dignity of the profession, it is your duty to guard against everything like coarseness and vulgarity, and undue forwardness, which is, in this day of progress, always offensive, particularly, to the refined, the sensitive and the fastidious, and which will disencline them to employ you, though they may think you highly competent in point of knowledge and skill. It is your duty never to give publicity to anything which is only known to you by the peculiar necessities and privileges of your profession. You are ex-officio the bosom confident of every person who becomes your patient; therefore, you should hold inviolate whatever comes under your notice, in your professional intercourse. Especially avoid the habit of referring to your cases in mixed crowds; never detail the occurrence of the sick room, however trivial or unimportant they may seem. There are some who, in order to gain the reputation of having a large practice generally, and perhaps the practice of some particular families, are in the habit of detailing the symptoms of every case they have with great minuteness to those who can feel no interest in such things, except of idle curiosity. I've no idea there is one before me who will so far forget his own self-respect, or the dignity of his profession, as to follow such examples, yet it is well to warn you lest you may at any time even seem to commit such fatal and disgusting errors, and thereby wound and betray the most sacred feelings of your patient, and degrade yourself and your noble profession, in the opinion of all educated and refined people.

Dr. Rush said disease was a lawless evil. This is true, and to understand its nature, and to meet promptly every change which may take place, it is your duty to visit your patients frequently, watch their symptoms, and accommodate your remedies to them and not to your convenience. Often the cure turns upon a remedy being used not only on a certain day, but a certain hour. This is particularly true in reference to typhoid fever. You will often find it necessary to cure such patients, to visit them at all hours of the night; therefore, it is your duty to do so, however great may be the sacrifice of selfish ease and convenience. This is especially important to young physicians; they have the leisure to make these visits. The oftener they see their patients, the more they know and learn of the character and nature of the disease, the effects of medicine administered; and, aside from this reason, it is your duty to visit them frequently from a proper sense of your awful responsibility. It will not afterwards avail you as a defence, when you are charged by a disappointed husband or wife, that you had relied on his or her statement, if you had the opportunity of ascertaining the correctness of them, but neglected to do so merely because it would have cost a sleepless night or a long ride. I caution you then, young gentlemen, as a general rule, never to rest satisfied with, nor act upon, the mere representations of the friends of your patients, when you can possibly ascertain how the facts themselves really stand by a personal examination. And above all, eschew even a tendency to superficial examination, look patiently and thoroughly into the symptoms and pathology of every case you are called to treat, or upon which you may be consulted, ever remembering that though there is no earthly tribunal before which your conduct and treatment may be called in question, that the great Judge of the universe is at all times rigorously scanning your acts and motives, and will in the great day of final reckoning, hold you responsible for the non-performance of any and all of your duties to the afflicted which have been entrusted to your care.

We could occupy much more of the present time in enumerating your duties under this head, but we forbear, as there is another branch of your duties, the proper knowledge and due discharge of which is a matter not only of great importance for your own happiness, but often for the good and safety of the sick. I allude to your duties to your professional brethren. As I said in the outset, to-day you enter the profession in full membership. Your diploma will entitle you to all of its privileges, and also obligate you to use your best efforts to support its dignity and preserve its honor, to elevate its standing, and to widen and extend the bounds of its usefulness. Therefore, it is your duty to stand by one another, never allow yourselves to utter a disparaging remark concerning your brethren, either as a body or individually, and especially before those who are or have been patients of such brethren.

If you should be called to consult with a brother, it is your duty to act, towards him, just as you would have him act towards you, were you and he to exchange places. If you should discover any new feature in the case, or error in the treatment, you should avoid exposing it to the profession, or the public, unless compelled to do so by some foolish obstinacy, on the part of the attending physician. Remember that you may one day find yourself placed in the same dilemma, and would wish to be in the hands of a considerate and honorable gentleman; then never speak, in society, a word against any of your brethren, except in such notorious cases as make it necessary, to maintain the dignity and honor of the profession. Always, as far as you can, conscientiously, act with a charitable forbearance, and in the full spirit of the following beautiful lines:

> "Teach me to feel another's woe
> To hide the fault I see,
> That mercy I to others show,
> That mercy show to me."

Again, it is your duty to be polite to your brethren, especially, when they are on a visit to your place of residence. Then you should call and see them, show them that you recognize them as brethren, and as far as your time and circumstances will admit, endeavor to make their sojourn in your city or community agreeable and pleasant. This is a duty you owe to yourselves and to the profession, and I will venture to give it as my opinion, that the failure on the part of eight tenths of the profession, to discharge this duty, is one of the great reasons, why the profession, has no more of the public confidence and the love and support of its members as a State or National Association. For example, after you, young gentlemen, have practiced a few years, acquired a reputation for science and skill, you visit Mobile, Charleston, Baltimore or Memphis, spend several days in each place, meet the physicians of the city, are introduced, you receive no attention from them, scarely common politeness, I ask you, to put the question to yourselves, whether you would have more or less love for the profession, whether you would sacrifice more or less to maintain its honor and dignity, whether you would have a greater or less desire to attend State Medical Societies? Your answer is obvious, and hence, I repeat, it is a duty you owe to yourselves, as educated gentlemen, a duty you owe to the profession, thus to be polite, kind and accommodating to your brethren. In union, cemented with love, there is strength. But there cannot be, nor should not be any union, only on the grounds of equality.

Such, gentlemen, is the best I am able to present, of the nature of your moral and professional duties. How feebly and imperfectly the exhibition has been, none know better than myself.

My object, as you perceive, has been to deal in plain truths, and not to make a display of learning. I have endeavored to tell you a few of your high duties, and to impress, upon your minds, the necessity and manifold advantages of education and science, in facilitating your discharge of those duties. But I must not pursue this topic further. Already, more time than I intended, has been occupied, but the subject is one of vital importance, and replete with suggestive thought. Take it, young gentlemen, study it, make yourselves masters of it, and resolve, to-day, to live up to its highest and holiest principles.

Lastly. It is to be observed, that your path to success and renown in your profession is, in fact, strewn with a thousand difficulties. They are so various in character, and so great in number, that it requires nothing less than a lifetime of professional service, to unfold them to you, in their proper order and magnitude. Allow me to mention, however, one of the greatest difficulties with which you will have to encounter, and a few of the ways in which it presents itself, namely: The ignorance of the public in regard to their duties to you, and the nature of medicine. This ignorance is manifested often in the manner in which they treat their family physician and in the great quantity of nostrums they buy, and the peculiar pleasure it affords them to give credit to the smallest possible good effects produced by them. For instance, if a member of a family should be slightly benefitted, by taking a few bottles of some celebrated bitters, the one thus benefitted and the whole family, would take special pains and the fearful responsibility to recommend it in every form or stage of any and all diseases, when they would, from their irresistible scruples of conscience, never recommend their family physician, whom they know to be a man of science and skill.

This ignorance is seen again, in a preference which is not unfrequently shown by intelligent citizens, for the uneducated, vulgar, rough, unrefined, drunken physician, to the educated, sober, polite and accomplished practitioner. This assertion will doubtless surprise many, but nevertheless it is true, and I will venture to assert that there are few communities, even in this age of intellectual improvement, that do not furnish proofs of its truthfulness. I once knew a very illiterate quack to have the entire confidence of quite an intelligent community. In a conversation with one of his neighbors, on the merits of physicians, he said he believed his neighbor, Dr. ——, was one of the best, safest physicians of his acquaintance, that he had his entire confidence. I asked him what his confidence was based upon. Well, said he, he is a self-made doctor—all that he knows is from experience, and you know that is said to be the best teacher, and his cures, sir, are so remarkable; about two months ago, he cured a young lady a few miles below me, after he said she had thrown up six coats of her stomach. I admitted that that was one of the most remarkable cures that had ever occurred in the history of medicine—that Christ himself, while he sojourned upon earth, wrought no cure or miracle superior to that. For a person to live after throwing up the whole stomach, and three coats more than the most scientific microscopic anatomist has been able to discover, was more than God could do under the present arrangement.

This ignorance also shows itself in the way the people suffer their minds to be influenced in forming their opinion of a physician's skill. Some judge of his qualifications by his dress; some by his manners—either polite or eccentric. I have in my mind, at this time, a physician who enjoys the confidence of a large portion of the intelligent citizens of one of our Southern cities, who owes it almost entirely, so say those who know him best, to his exquisite politeness.

It is said that "Dr. Radcliffe, of London, Dr. Pitcairn, of Edinburgh, and Dr. Butler, of Cambridge, owed much of their reputation and business to their eccentricity of manner and conduct." Some judge of his capacity by the magnified and disgusting importance which he may give to the most simple diseases, and his minuteness and great caution in inquiring into the various symptoms, particularly when called to consult with the family physician. Some judge the physician by being able to observe the character of disease at a mere glance at the countenance, affecting an intuitive knowledge that is rarely if ever possessed. Some allow their minds to be influenced by his religious or political creed; some by the position and influence of his family and of those who patronize him. This is discouraging enough to the truly scientific physician; but this is not all. The ignorance of mankind of the nature of medicine is seen in another way, which is still more perplexing than any we have mentioned. They not only confide their health and lives to quacks and unqualified physicians in preference to scientific and truly skilful ones; but we often see very good and otherwise sensible people, who place implicit reliance upon what they call spells and charms to cure their diseases. For instance, to stick your finger through as many holly leaves as you have warts, has long been a sovereign remedy with many people in Georgia. One who has killed a mole in his hand, it is believed by many, has the power to discuss any "rising" simply by passing his hands over it a few times. To tie a cord composed of nine different strands around a plumb tree, and walk off without looking back, and not divulge it, is also regarded by many as a certain cure for chronic chills.—Such superstitious delusions relative to the remedial power attributed to spells and charms have existed from time immemorial, and still exist to a very large extent even in the "Empire State of the South." It is said in Burton's life of Hume, that the poor visited the tomb of the Abbe Paris (Cemetery of St. Medard,) to bless his memory, and pray for the state of his soul, and while doing so the sick were cured, and the blind restored to sight. Admit this to be true, and admit also that many have gotten well after applying the plumb tree and mole charm, does it follow that such charms did or can have any influence in the animal economy. Not at all. The test of what is often called experience is not alone sufficient to prove the value of a remedy in the cure of disease. Because a person has been taking calomel, or some of the infinitesimal doses of Homœopathy for the cure of some disease, we must not be satisfied to say he has been cured by these agents merely, because he has got well during their administration, unless we can clearly show that their agency on the functions of the body is always or generally such as to render such a result probable; but attribute the cure to that *vis medicatrix naturæ*, which in hundreds of cases is all sufficient to resolve the disturbances of health. The number of facts in support of our last position might be augmented *ad infinitum*, but our time will not permit us to indulge further on this point. Allow me to remark, however, that this great obstacle will not be easy overcome; indeed, it can never be effectually eradicated, especially so long as physicians are kept the sole depositories of medical learning from a false idea that it would be an innovation upon the conventional rules of professional etiquette to disseminate general medical knowledge among all classes. The time has been when the profession, almost to a unit, was opposed to this plan of general diffusion of hygienic and general medical knowledge, but many of late have been made to see their error in this respect. Indeed, a new spirit is awakened throughout the profession, and if we be allowed to reason from the signs, the day is not far distant when the learned and scientific portion of the profession at least, will unite in the recommendation of this plan. The cry will be from east to west, from north to south: Let the public be enlightened; let them understand the outlines, at least, of their own system; let them have a knowledge of the laws of health; let every literary college establish a professorship of hygiene; let it be taught in every school; let every physician feel that it is his duty to instruct his friends upon the general outlines of the science of medicine and hygiene, so that they may know that disease is a morbid state, or the effects of a violation of some law of the animal economy, and that it is cured not by tricks and charms, or by giving large or small doses either of any known or secret remedies indiscriminately, but by removing the cause, either by leaving it to the repelling or curative power of nature, or by using remedies directed by a good judgment, armed with correct views of the pathology of the disease at the time, and a thorough knowledge of the therapeutical effect of the remedies. Let this be done, and then, and not until then, will this great obstacle (the utter ignorance of the public of their own mechanism, and the law by which it is controlled, and life and health preserved,) will be removed, and along with it the thousand and one evils which are its legitimate offspring, and which have ever retarded the wheels of medical science, and have been insurmountable barriers in the way of many of its true votaries to usefulness and fame.

Gentlemen, this is an important and inviting theme; it involves much, and I would like to enlarge at this point, but time admonishes me that I must draw this discourse to a close. There are many things pertaining to your duties, for the want of time, I have not alluded to; many which you will find laid down in the code of medical ethics, which, if you will read carefully before you enter upon your duties, and live up to its requirements, will guide you safely over many rugged paths in the profession of your choice. "The first impressions are the most lasting." There are many, very many, good and true brethren in the profession, who will ever regret that it was not their good fortune to have read it before they took steps which they can now never retrace.

My task, gentlemen, is well nigh accomplished. It remains but to pronounce the parting words, and we separate, perhaps, to meet no more, till we meet at the great judgment bar, where we will all have to give an account for the manner in which we have improved our time and talents. I have endeavored to tell you the nature of your profession, your duties to yourself, to your patients and the public, and also to your professional brethren, as educated enlightened Christian gentlemen. Go then, gentlemen, into the untried world; a rough field of battle awaits you; put on the armor, then, that is best adapted for the conflict; determine to excel in all that is magnanimous and great; keep constantly in view the great responsibilities that rest upon you, as guardians of the public health; be true to the dignity of your heaven-born profession; be true to the reputation and prosperity of your Alma Mater; be true to yourselves, your country and your God; "get wisdom, get understanding; wisdom is the principal thing."

Let me entreat you, young gentlemen, to study the Scriptures; embrace the Christian religion, which is the "basis of every excellence—the subsistence of every virtue. It is your ornament and your strength—seek it ye who have it not—hold it fast ye who have it." It is the tree of Heaven—the gift of God to sweeten life's bitter waters; carry it with you to what ever part of God's creation you may wander; "trust it in prosperity; resort to it in trouble; shield yourselves with it in danger, and rest your fainting head upon it in death." Do this, young gentlemen, and though the world may at first look coldly upon you, and your pathway be dark, God will be with you to lead you in right paths, and you will go through life, with usefulness and honor, and to the grave with the last and blessed hope of a dying man.

I shall detain you no longer, my young brethren. Your moral and professional duties—your difficulties and their antidote are all before you. Yes, the world is before you. Your profession, with all its noble incentives to labor; with its broad field, decked with the rich and pearly gems of science, are all before you. The hill of science, the summit of fame, and the hopes of Earth and joys of Heaven, are alike before you. Then summon to your aid all your courage; call out your resources of energy and perseverance; arouse the latent fires of ambition, which slumber in your breast; buckle on your armor and prepare for the mighty conflict; go forth with "stout arms and brave hearts," determined to make a mark on your day and generation, which no time can efface—determined to climb the "hill of science"—to mount the summit of usefulness and fame. Go forth, gentlemen, armed with such noble purposes and high resolves, and, under the blessing of Almighty God, you may live to reap a golden and glorious harvest; you may see the wreath of fame upon your brow, and behold your name written among the few, "who were never born to die,"

> "Like those who sink to rest,
> With all their country's wishes blest."

And as Earth's crown of laurels fade from your brow, it may be replaced by a "crown of righteousness," wreathed in Heaven's richest jewels, and shineth with a lustre that fadeth not away, within the golden streets and pearly gates of the "New Jerusalem."

## ARTICLE II.

*Additional Observations upon Veratrum Viride.* By V. H. Taliaferro, M. D., Atlanta, Geo.

Some time since I prepared an article for the Atlanta Medical and Surgical Journal, upon Veratrum Viride, which was published in the March No., 1857, since which time I have continued my observations with veratrum, being in the habit of almost daily prescribing it, and my conclusion most irresistably is, that it is a remedy of such important therapeutic properties, as to demand from the profession a fair and unprejudiced investigation.

The profession, however, as in this case, are too much accustomed, in the investigation of new remedies, to laud their virtues alone, and leave unnoticed the peculiar circumstances under which their administration would be improper. When the therapeutic application of remedies to disease are fully appreciated, we are enabled with comparatively little difficulty, to point out conditions contra-indicating their use; as in the case of opium, mercury, arsenic, antimony, quinine, &c., and in fact, all powerful remedial agents, which are well known to be frequently contra-indicated by circumstances connected with the diseases to which they are applicable. And thus it is with the remedy under consideration.

We are well satisfied that the diseases to which veratrum is particularly applicable, are those of an inflammatory character; and this peculiar applicability is plain, when we consider its influence upon the circulatory system, controlling excessive action of the heart and arteries, which is an invariable consequence of high grades of inflammatory action.

It is upon this principle, we contend, that veratrum often answers the purpose of the lancet in inflammatory affections. We have found it more effectual, prompt, and decided in the treatment of *pneumonia* than in any other disease, whether sthenic or asthenic in its character. Its sedative action upon the circulation, its relaxing and expectorant properties render it peculiarly adapted to the treatment of this disease. But, notwithstanding this peculiar applicability, and the great advantage to be derived from its use in the treatment of pneumonia, we have been led to the conclusion, that in certain stages of the disease, it should be used with much circumspection, viz: in hepatization of the lungs. If either lobe of the lungs become hepatized, the other, perchance, inflamed, the circulation of the blood *must*, of necessity, become much accelerated, as *must* also the inspiration of oxygen, to properly arterialize the circulating fluid, in consequence of the diminished amount of blood exposed to the action of atmospheric air at each inspiration. It must be evident, then, that if under these circumstances, we compel the heart to beat its accustomed number of pulsations, for any given time, the blood must become imperfectly oxygenized.

Upon these considerations, then, we are forced to the conclusion, that veratrum viride, in hepatization of the lungs, should be administered with much care and circumspection, attention being continually directed to the number of pulsations of the heart per minute during its use.

We would not wish to be understood as condemning entirely the use of veratrum in hepatization of the lungs; on the other hand, we would advise it as important, but would recommend a more particular attention to its effects upon the circulation than is requisite under more favorable circumstances for its administration. That the heart may be made to pulsate too slowly for the proper arterialization of the blood is evident; if so, then the above conclusion is natural and reasonable.

As the capacity for the reception of venous blood in the lungs is lessened, in the same proportion will the heart's action become accelerated, in order to supply the demand of the system for oxygen. If, then, this accelerated action is the effect of diminished capacity of the lungs, is it not plain that if it is injudiciously interfered with, without at the same time enlarging the lung capacity, that we deprive the blood of its natural supply of oxygen? Every one has noticed the rapid respiration of the female whose chest is tightly laced, and if the pulse be then examined, it will be found to be much accelerated, corresponding to the rapidity of respiration, and it is evident that it is the result of the lungs' diminished capacity. Suppose we administer to such an individual veratrum viride, until its specific action is obtained upon the circulation, is it not plain that unless we then relieve the lungs from its compression, that we very soon would have the system diffused with imperfectly arterialized blood and its sequences. So would follow the same result in hepatization of the lungs.

In typhoid fever the virtues of veratrum are not so fully and effectually displayed, but may be used advantageously as an adjuvant to other and more supporting treatment. We think much discrimination should be exercised in carrying it to the extent of nausea and great muscular relaxation, in this disease, from the fact that nervous tone and energy, under such circumstances, would be materially lessened, while one of the great indications to be fulfilled in the treatment, is the maintenance of nervous energy by giving, as far as possible, tone and strength to the whole system.

Our experience with veratrum has taught us that under ordinary circumstances, in the treatment of any disease, it is unnecessary to carry its effects to the extent of great muscular and nervous prostration; but more especially in typhoid fever, we believe discrimination should be exercised in producing its specific action upon the circulation, for fear of nausea and muscular relaxation.

We consider veratrum an important addition to our list of therapeutic agents, and doubt not that science and experience will 'ere long give it that exalted position which its intrinsic merits so justly demand; but we are forced to the conclusion that Dr. Norwood has materially lessened the interest the profession would have evinced in its investigation, by endeavoring to leave them under the impression that unless *his* preparation [" *Our Tinct.*"] was purchased at an extravagant price, it must of necessity be spurious. Dr. N. has either become a monomaniac, or else allowed pecuniary considerations to have led him from the track of an honorable and scientific profession, by thus sacrificing all professional pride. It is of frequent occurrence for unprincipled empirics to lead astray the populace by their nefarious pretensions, but it is of somewhat rare occurrence for an M. D. to attempt the practice of empiricism and quackery upon the *medical profession* with the boldness with which Dr. N. proposes his infallibles for scald-head, convulsions, &c. Pity for Dr. Norwood that he had not forsaken his pen before publishing to the world that he was soon to bless the profession with a cure for scald-head, &c., besides endeavoring to lead them into the erroneous impression that they could not obtain pure, an indigenous plant, growing over many States of the Union, unless submitted to his inspection, or its tincture, unless prepared under his supervision.

## ARTICLE III.

*Effects of Decayed Teeth.* BY J. S. DIXON, Ashland, Tenn.

I may be thought egotistic in publishing my own case, but as a man can describe his own feelings better than another's, these are, I think, the cases that should be preferred for publication.

I am aged thirty-three. During the years 1855-'56, I was in very delicate health, and several of my teeth became badly affected, though they seldom ached. In 1855 I was frequently affected with a severe neuralgia, or severe pain over my left eye, and the left side of my nose became affected with a constant dripping, which was very unpleasant, and caused me to fear ozæna; this became much worse, and during the last winter I was obliged to remove large plugs of hardened pus and mucus every day with a pair of forceps; this pressed the septum narium greatly to the right side. During the latter part of the winter, my fauces became badly inflamed and ulcerated, and resisted every means of cure, including caustic gargles, tonics, &c. In April the neuralgia returned more severely than ever, and resisted every known means of treatment. I then had all my carious teeth extracted by Dr. J. T. Collier, of this county, when my throat immediately commenced improving, and the discharge from my nose began to subside, since which I have had but one slight attack of neuralgia; my throat is well now; the discharge has nearly ceased, and my general health has greatly improved, and I have used no medicine since the teeth were extracted. My bowels are now regular, and my appetite good, which has not been the case for the last two years. The septum narium still remains so much to the right of the median line as almost to occlude the right passage. I intend to try to rectify this with ents.

# SELECTIONS.

### *On the Prevention of Abscess of the Breast by Frictions with the hands; and on the Treatment, when op'n, by means of Compressed Sponge.*

By S. Conant Foster, M. D., late Physician to Bellevue Hospital.

I have been often asked to commit to paper my views in regard to the treatment of mammary abscess, and now that the method which I have found most beneficial has been tried by others, and has stood the test of their observation, I feel that it has become a duty to publish the results to the profession.

Under the head of "Hospital Reports," will be found a number of cases treated at Bellevue Hospital, under the supervision of Dr. Stephen Smith, by Dr. J. G. Johnson, one of the House Surgeons of that institution. The MSS. of these cases have been kindly submitted to my perusal by Dr. J., to whom I feel much indebted for his courtesy, and for the care which he has bestowed upon them. These cases, in connection with those which I shall offer, afford conclusive evidence, it seems to me, of the superiority of the treatment pursued over the old methods. What these old methods were may be learned from Dr. Johnson's paper, where the authorities will be found collated, and the opinions and advice of the principal surgeons of the present day, quoted in their own words.

Before entering upon the subject of the best mode of treatment of any disease, it is proper to consider if the disease may not be avoided altogether. Now, I do not hesitate to assert, with regard to abscesses of the breast, dependent upon lactation, that this may be done in almost every case. I base this assertion upon the following grounds: 1. During six months that I passed in attendance upon the Dublin Lying-in Hospital, under the mastership of Dr. Evory Kennedy, now nearly twenty years since, there were about twelve hundred births. Only two abscesses of the breast occurred among these patients during their stay in the hospital. One of these was the result of an injury, and came on before confinement; the other was in a patient of marked chachectic condition. 2. For the first twelue years of my practice, I had not a single case occurring to a patient of my own during the first month after delivery; and I have never had one since which was not due to mismanagement on the part of the patient, or want of skill in the nurse, or to an already depraved condition of the blood. 3. For nearly six years that I was visiting physician to Bellevue Hospital, excepting in the first two months, no case occurred among the lying-in patients under my charge, which I attribute to my insisting strenuously upon the adoption of the means I had seen to be so efficacious elsewhere.

Laying it down as a rule, therefore, that *all milk abscesses should be prevented*, the exceptions are—1. Cases where there exists a marked cachexia, due to syphilis, scrofula, and the like. 2. Where there has been any external injury. 3. When the nipple is in such a state as absolutely to obstruct the passage of the milk. 4. Where, as in hospitals occasionally, there exists an endemic tendency to purulent deposits.

Let us now glance at the means by which this prevention is to be accomplished. They will be found to be very simple. So simple, indeed, that I should hesitate to dwell upon them, if I were not convinced that, when they fail, it is for want of a skillful application of them. If, therefore, I should seem to be discoursing of trivialities, I shall shelter myself behind the example of the great Abernethy, who boasted, in his discourse before the College of Surgeons, that he had taught that august body how to make a poultice. I desire, too, to urge upon physicians to devote more personal attention to these apparently little matters; for the most faithful and well-intentioned nurses will often fail, for want of knowledge of the structure and physiology of the part which they have to deal with.

The prophylactic treatment of the milk abscess should commence, strictly speaking, at the age of puberty. This is a matter upon which mothers should be well informed, as more will depend upon them than upon the physician. At the period when the development of the breasts is taking place, much mischief is very often done by the use of improper clothing. A close-fitting waist, keeping the nipple compressed at this period, and preventing it from taking its natural form, though it may occasion no incovenience at the time, will be a fruitful cause of suffering when the girl has become a mother. For, in these cases, it will probably be discovered after confinement, that the nipple, instead of being prominent, is depressed, so that the child cannot seize hold of it. It has then to be drawn out by breast-pumps and other appliances, often at the cost of great pain. It becomes inflamed and excoriated; and, perhaps, the inflammation may be propagated along the course of the lactiferous tubes, and result in an abscess at the base of the breast.

This is a cause of the breast abscess which we seldom have it in our power to prevent. But where a depressed condition of the nipple exists from this early error, much may yet be done if it is permitted to treat it during pregnancy. In this condition, a second development of the organ takes place. There is an increased vascular and nervous activity, by taking advantage of which we may often remedy the old trouble in some degree, and provide a good nipple for the period of lactation. To effect this end, the first precaution is to avoid all undue pressure from clothing, during the earlier months especially. The nipple should then be drawn out daily, with moderate force, by a breast-pump or by the mouth, which accustoms the part to the traction it will receive from the child. This process can be suspended for a few days at a time, if the nipple should become sore. Astringent applications, as is well known, tend to harden the skin of the nipple. Of these I know of none better than the popular one of borax and brandy, which should be applied daily during the last months of gestation.

There is a certain danger attendant upon these manipulations with the nipple during pregnancy, which must not be lost sight of. It is possible, in this way, to stimulate the uterus into premature action, and so to provoke a miscarriage. But this can only occur in exceptional cases, and will probably give sufficient warning of its approach. Lest it should occur, it is well not to persist in drawing out the nipple longer than ten or fifteen minutes at a time, and to abandon the practice altogether should pelvic pains, or other symptoms of approaching labor, manifest themselves. I have never seen a miscarriage so produced; but in one case which I attended, the process had to be given up on account of the severe, contractile, uterine pains which followed each application of the pump.

With the management of the nipple after child-birth, every one is familiar. Probably, under any treatment, we must have sore nipples occasionally. As I have nothing new to offer concerning the treatment of these, I will simply say that I rely more upon the protection of the part from friction by the clothes, upon allowing the air to circulate around it, and upon the application of castor-oil after every time the child sucks, than upon most of the other means in common use. The neck of a common junk bottle, cut off, made smooth, and worn constantly over the nipple, accomplishes the two first of these objects very satisfactorily in most cases.

So much of the prophylaxis of breast abscess as far as the nipple is concerned. As to the general care of the breast after childbirth, the obstetrical text-books give a variety of directions. No doubt the first and most important indication is to prevent the accumulation of milk in the breasts. He who succeeds in doing this has overcome the chief source of danger of abscess. With this in view, I examine the breasts carefully on the second day after delivery, and direct the nurse, in case there should be the slightest hardness, to rub them well with warm oil *until they are soft*, and to repeat the operation as often as the hardness returns. This is a very common and a very simple direction, and yet it is very rarely carried out efficiently. When it is done well, it is worth more than all other means put together to keep the breast in good order. I do not despise cathartics, and nauseants, and sudorfices when inflammation has commenced, though even then I do not rely *chiefly* upon them to prevent the formation of matter; but I must express my disapprobation of poultices with a view to resolve the hardness; and if it were necessary, I would dispense with all other means, excepting the nursing of the child, and rely upon the rubbing alone, always provided it could be done frequently and efficiently.

A great element of success is to commence early—*obsta principiis*. The rubber should stand behind the patient, and having lubricated the whole organ freely with oil, should use both hands, one for the friction and the other for counter-pressure, rubbing in the direction of the milk ducts, *i. e.*, from the periphery of the breast toward the nipple. If this is done with *firm pressure*, a few minutes will generally suffice to reduce the organ to a soft condition; and in case the milk has come, it will flow freely from the nipple. If the child is vigorous and takes the nipple well, there will usually be no need of pursuing this plan after two or three days. But it is desirable to keep an eye upon the organs, and in case any induration remains after nursing, to rub it away at once.

I have intimated that it is difficult to get this well done. This is sometimes the fault of the patient, and sometimes of the nurse. The patient's breasts are very tender to the touch, and she thinks she cannot bear the rubbing. But if it is done rightly, the pain will be of very short duration, and at the end of a few moments she will be able to bear any amount of pressure without suffering in the least. There seems to be a certain amount of tact requisite for this little manipulation, which many nurses never acquire. In such a case, I think it is the duty of the medical attendant to lay aside all considerations of dignity, and do it himself. But as the physician cannot be constantly in attendance, it is necessary, if after one or two trials the induration is not permanently discussed, to resort to other means. And here we have a most invaluable resource in the compressed sponge.

For the suggestion of this mode of treating such engorgements, I am indebted to Dr. J. P. Batchelder, of this city, who has applied this article to so many excellent uses. Its use in the treatment of open breast abscesses I believe I was the first to test, and it is a chief object of this paper to record the results of the method. The mode of preparing the sponges is very simple. A selection should be made of specimens which combine softness with elasticity, and of a size to suit the indurated portion. After freeing them from sand they should be dried, and then subjected to a heavy pressure for twenty-four hours. A common letter-copying press answers the purpose exceedingly well. They are then to be placed upon the breast and confined by a roller bandage, after which they are to be thoroughly saturated with lukewarm water. The nipple should, if possible, be left exposed, so that the child may nurse as usual. I will relate briefly the first case in which I adopted this plan. It has proved equally satisfactory in every instance in which I have employed it since.

A lady whom I had attended in three confinements was, after the third, threatened with abscess in the breast. I directed, as usual, the frictions with warm oil, and administered, subsequently, cathartics, and nauseating doses of tartar emetic. The inflammation was thus kept in check, but the induration continued. This patient had a most faithful nurse, who rubbed the breast very perseveringly for several days, but without much effect. Satisfied that the want of success was due to the manner of the rubbing, I resolved to rub it myself, and in twenty minutes or less, the breast was completely soft. Next day, however, it was nearly as hard as ever. I now determined to comply the compressed sponge. Two days wearing of this entireiy removed the hardness, which did not again recur.

I have pursued the same plan with the like success in engorgements occurring at a later period in lactation, where the frictions with oil had failed to subdue the hardness.

Before proceeding to show the effect of the application of compressed sponges to abscesses which have already formed and been laid open, I desire to call attention to the treatment directed by the most eminent of modern writers on the subject. For this purpose, I beg to refer to the remarks accompanying Dr. Johnson's collection of cases. I also appeal to the experience of every surgeon to bear me out in the assertion that, in the deep-seated abscesses of the breast of nursing women, it is reasonable to anticipate a long and tedious suppuration, with the chance of sinuses and fistulous openings, enduring for many months. Not only is this true, but the plans formerly adopted of stimulating injection, setons, extensive incisions, objectionable as they were, were often unsuccessful, or only cured by destroying the organ in great part, or, at least, rendering it completely unfit for performing its proper function.

The only way of avoiding these evils, that has been attended with any degree of success, is to apply pressure in some form or other, generally by means of strips of adhesive plaster. Recently, M. Chassaignac has published a memoir upon this subject, (*Gazette Medicale*, 1855—Nos. 3, 4, and 39) which details the method and results of a new system of treatment, presenting considerable advantages over all that preceded it.

His plan is as follows:—As soon as the existence of matter is ascertained, he makes one or more small punctures, and having pressed out the matter as much as possible, injects the abscess with lukewarm water, using generally the hydrocele syringe or the irrigator, and continuing the douche until the cavity seems entirely emptied of pus, and the liquid which flows out is perfectly limpid. The cupping-glass is then applied over the wound, and, if necessary, the same process is repeated until every drop of pus is evacuated. The wound is then closed by adhesive plaster and the *cuirasse* applied. This consists, if I am not mistaken, of numerous narrow strips of plaster, so adjusted as to envelop and compress the entire breast. The arm is then bound down to the side, and the dressing is allowed to remain twenty-four or forty-eight hours, unless pain or tumefaction indicate the re-filling of the abscess. At the end of this time the dressing is removed, and it is found that union by the first intention has taken place, in the proportion of about one-fifth of all the cases. Sometimes there is a little secretion of plastic lymph, and then the *cuirasse* is re-applied once or twice. A cure is thus accomplished in from one to eight days.

In case the abscess refills, the treatment of union by the second intention consists in the daily, or more frequent use of the injections and cupping, with the addition of the introduction of canulæ into the wounds, made of soft india-rubber, and split at one end, so as to have the shape of the letter Y. These are kept in place by a narrow strip of adhesive plaster passed between the forked ends, and shortened from time to time, as occasion may require. The breast is kept covered with a poultice, and the poultice with oiled silk. In very grave cases, where the abscess is at the very base of the gland, the seton is resorted to.

By these means M. Chassaignac considers, and shows, that the duration of these abscesses is much abbreviated. He says that, since he has adopted them, he never sees the cases last for whole months as was formerly frequent. "A duration of three months, for example, is no longer known in our wards." Of the cases reported, where union took place by the second intention, one was cured in a week, and most of the rest within a month, but it is not pretended that all get well as soon as longest of these periods.

I have been thus particular in furnishing an abstract of M. Chassaignac's method, because I believe it to be little known in this country, while it is eminently worthy of attention. At the same time, I desire to invite a comparison of the results of his treatment and that by the sponges, of which I am now about to relate some cases.

One word as to classification. M. Chassaignac makes two grand divisions, viz.: 1. Extero-mammary. 2. Intry-mammary. The first of these divides into sub-cutaneous and sub-adenoid. The second into interlobular and canalicular. Each of these four is again divided into several varieties, as diffuse, phlegmonous, angioleucitic, etc. While I admire the exceeding nicety in diagnosis of this distinguished surgeon, and have no doubt of the correctness of his classification, yet I submit that, practically, it is not of very material consequence to make such minute distinctions. What we do wish to know, however, in every case is, whether or not the gland itself and the lactiferous tubes are involved. For, in the one case, we *may* allow the child to draw the milk from the breast, while in the other it *must* be strictly forbidden. We know that the tubes are affected, when we see milk mingling with the pus which is discharged from the abscess, or when pus is discharged from the orifices of the nipple. But we cannot always be sure that they are not involved when neither of these things takes place, since the secretion of milk may be entirely arrested, and so not appear at the cut, or pus may be formed at the extremities of the canaliculi, and discharge into the cavity of the abscess, only finding its way through the nipple as the case approximates to a cure. This happened in a very marked manner in one of the cases which I shall relate.

I am unable to furnish exact notes and dates of the three or four cases of *superficial* abscess which I have treated by the sponges. They have, however, all healed up in a manner equally rapid with those reported by Mr. Chassaignac, viz.: in twenty-four to forty-eight hours. In one instance the abscess was on the inner edge of the gland, and of the size of a hen's egg. In another there were two, and on each side, pointing within the areola, occurring on successive days. Only one application of the sponge to each was required, the infant continuing to nurse without interruption. The cases which follow involved a large portion of the organ and the milk tubes.

*Case* 1.—Mrs. H. J. was confined with her first child August 1, 1855. I left town a few days after, and on my return, about the first week in September, found her with a very large abscess, involving nearly the whole breast. The patient, naturally robust, was in a state of extreme prostration. The brerst was opened, in the course of the next few days, in five different places, and discharged an enormous quantity of pus. A probe could be passed its whole length, in different directions, through and under the gland. The entire organ was in a state of induration and enlargement. No milk could be got from the nipple. On September 13, a new point of inflammation having appeared on the upper part, and the skin being already bright red over a space of two inches square, I applied two sponges—one to the newly inflamed part, and the other to the lower part of the breast, covering all the incisions.

September 14.—Inflammation and hardness entirely gone in the first named locality; the size of the breast diminished one-third; the cuts healing, and the milk running freely.

Being unable to obtain a supply of the compressed sponges, I did not repeat them on the 14th; but they were re-applied on the 15th, 17th, and 18th. On this last day, the wounds had all healed, excepting one near the nipple, from which, as well as from the nipple, the milk flowed freely. Breast about one-half the size of the other. Some induration in the lower third only.

September 19.—Further improvement. Sponges omitted--the breast being merely suspended in a sling; patient rode and walked out.

September 20.--Some soreness and induration in upper part of breast. One of the cicatrized points below looking red, I opened it with the end of a probe, and let out two or three drops of pus. From another, which was opened in the same way, a few drops of clear serum flowed. Re-applied sponges.

September 21.—The fistulous opening near the nipple gave exit, after pressure upon the upper part of the breast, to about a drachm and a half of sero-sanguineous matter. The other openings firmly healed again, and the breast was everywhere softer, and free from tenderness.

From this date to the 26th the sponges were applied daily, with one exception. On the 27th, the patient left town on a visit to some friends, the general health entirely restored—the whole breast being soft; the milk flowing very freely; the fistulous opening almost healed, barely receiving the point of the probe, and yielding a single drop of serum. From the outset to the close of this case, there was no pain following the application of the sponges—the patient, on the contrary, obtaining marked relief under their use. A very slight inconvenience was felt, the first day or two, from the tightness of the bandage. The patient was allowed full diet, with wine.

A year afterward, I attended this lady in a second confinement. There was some threatening of inflammation a second time, but it disappeared after one or two rubbings, and she nursed her child on this side as well as the other.

*Case* 2.--Mrs. W. was confined near the last of May, 1856, with her second child. This lady had been attended in her labor by a homœpathist, and was doing well until about the tenth day, (notwithstanding a very constipated state of the bowels, which, as usual, had not been interfered with,) when the breast began to inflame. It was treated lightly by the attendant, who left town, and I was called in on the evening of June 6. Although there was some evidence of suppuration, I yet hoped to avoid an incision, and on the 7th applied the compressed sponges, and continued them until the 10th, with entire relief of the pain, and subsidence of inflammation, when, finding that it was indispensable to evacuate the matter, I ordered a poultice, and opened the abscess on the 11th, giving exit to about half a pint of pus, mixed with milk. On the 12th I applied the sponges again, and continued them daily until the 17th. On the 14th the discharge consisted almost entirely of milky serum.

June 16.—Dressing omitted at night.

June 17.—A soft moist sponge constituted for the compressed.

June 18.—Bandages omitted. Two or three drops of serum only from the cut.

June 20.—Wound perfectly cicatrized; breast free from hardness everywhere, and milk flowing freely.

In this case the sponges were only required for five days after the abscess was opened.

*Case* 3.—Mrs. M., æt. about 20 years, of healthy constitution, was confined on February 25, 1857, with her first child. She had a very tedious labor, in the course of which I was called to see her, in consultation. After delivery she did well for the first week or ten days, when symptoms of breast abscess showed themselves. On March 11, I was again requested to see her, and found her with the right breast very much swollen and hard, yielding no milk; the left also hard, to a less extent, but giving milk; and the patient in a very feeble condition. There was, with all this, very little soreness or acute pain, but the nervous system was so far affected that she could not sleep, and the pulse was upward of one hundred. There was an obscure sense of fluctuation in the right breast, but so uncertain, that I did not feel justified in making an incision. I, therefore, applied a poultice, and, on the next day, finding no change except an increase of tumefaction, and, aggravation of all the symptoms, I decided to apply the sponges. By request of the attending physician, I now took entire charge of the case. The first application was followed by a decided relief of all the symptoms. On the 13th, the matter was apparent enough, and I made an opening, letting out about eight ounces.

On this day, and the 14th, the breast was poulticed, and discharged a large quantity of pus.

March 15.—Sponges applied.

March 16 and 17.—On each of these days new collections of matter were discovered, not communicating with the first, and were opened. After evacuating the matter, which was deep-seated, the sponges were re-applied. .

March 18.—After passing out the matter as much as possible, a small slough appeared at the principal wound, which was seized by the forceps and extracted. A second slough now appeared, which was still firmly adherent. The cavity was injected with warm water (which caused no pain), and completely washed out. Poultice.

March 19.—The slough appeared loose, but so large that it was necessary to dilate the wound, after which it was extracted with a dissecting forceps. The removal was followed by the discharge of a large quantity of matter, apparently from the very base of the gland. The slough extracted was as large as a hen's egg. After its removal, the external half of the breast collapsed, forming a considerable depression. Air got into the cavity, and insinuated itself into its ramifications, being perceptible to the touch on the superior and sternal edges, at points farthest removed from the first seat of the matter. Poultice applied this day and the next.

March 21.—The discharge having somewhat diminished, the sponges were re-applied.

March 22.—Same. Discharge very much diminished, and the breast everywhere softer.

March 23.—Further improvement. On gently rubbing the breast with oil, a few drops of milk appeared at the nipple. General condition very much improved. Gaining strength daily.

From this date until April 6, the sponges were applied daily. At each dressing the breast was rubbed with oil. The secretion of milk was re-established—a certain quantity flowing spontaneously, and two or three ounces obtained from the nipple at each dressing. Milk also flowed from the principal opening, the others having closed. Before the cavity had entirely healed, a few drops of pus found exit at the nipple. Meantime, the left breast, which had continued more or less hard on the axillary side, suppurated, and an opening was made on March 30, which discharged about four ounces of pus, and a few sloughy shreds. This breast had continued to secrete milk. It was daily rubbed and dressed with the sponges, like the other. There was little pain or soreness near the seat of the abscess. On the sternal side, however, inferiorly, and at the superior edge of the gland, there were two points where the patient complained of considerable tenderness on pressure. There was also some induration at these points, which felt to the touch like the distended vessels of the cord in varicocele. After rubbing them for some minutes in the direction of the nipple, a considerable quantity of thick milk was first discharged through the natural orifice, followed by a few drops of pus. Evidently, the matter had formed within and at the extremities of the milk tubes, and had been there imprisoned. The same phenomenon presented itself for several successive days, the quantity of pus gradually diminishing and that of the milk, from this portion of the organ, increasing. At length, all purulent discharge ceased, and with it all induration and soreness.

Finally, on April 8, all the wounds were entirely closed; all induration had disappeared, and the patient had entirely recovered her health.—There was milk, apparently of good quality, in both breasts—the right secreting a little, the left freely. An attempt was made to induce the child to nurse, but having been kept from the breast so long, it refused to lay hold of the nipple. After an interval of three months, the breasts continued to secrete a little. They were entirely healthy, the cicatrices scarcely noticeable.

Although this case was of longer duration than either of the others which I have related, I consider it as furnishing fully as valuable testimony to the merits of the treatment as any of them. Every application of the sponges was followed by marked improvement, while that and the daily frictions brought about a restoration of the suspended secretion. A very interesting point is the evidence furnished that pus may form at the extremities of the milk tubes, and be discharged through the nipple, requiring no other outlet.

I suspect that, in this case, the sloughs were formed at a very early period. The comparative absence of tenderness, combined with such extensive induration, leads me to entertain this opinion. The duration of the case was probably doubled by their occurrence.

*Case* 4.—Mrs. C. confined with her fourth child June 12, 1857. This patient had been in very feeble condition for a long time. Soon after the birth of the last child, about three years since, I had detected tubercles in her lungs, and during the whole of this gestation she had copious and persistent hæmoptysis. She got along pretty well, however, during her labor, and afterward for about a fortnight, when she had one or two poroxysms apparently of intermittent fever, which was relieved by quinine. A day or two after, the right breast became painful and inflamed, and a small abscess formed near the periphery of the gland, toward the sternum. This was opened, discharged about a drachm and a half of pus, and healed without difficulty. Two days later there was renewed pain and tumefaction, chiefly on the opposite side of the breast; the whole breast became hard, then œdematous, and I had no doubt of the existence of matter, though it did not point. About the same time the saphena vein of the right leg became inflamed, for a space of about four inches, near the knee. The patient was extremely averse to the lancet, and I, therefore, seeing that there was no certainty of reaching the matter without an extensive cut, contented myself with poulticing for several days, treating, meanwhile, the phlebitis, which got better. At length, detecting unequivocal fluctuation on the outer side of the breast, I made an opening with a tenotomy knife, running it in nearly an inch and a half, but nothing followed except blood and a little turbid-looking serum. The cut bled a good deal during the day, and weakened the patient considerably. Up to this time I had been unwilling to use the sponges on account of the difficulty in the lungs, fearing, lest the wet condition in which the patient's chest must necessarily be, might light up the old trouble, which seemed now quiescent. But having examined her chest carefully, and found much less evidence of extensive disease than I had anticipated, I decided to take the risk, and on July 13, the day following the second incision, applied them so as to compress the whole breast. In twenty-four hours the œdema had almost entirely disappeared; in two days more, the milk, which had been entirely stopped, began to flow. I continued to apply the sponges daily for a week, very much to the comfort and satisfaction of the patient, who said that nothing had given her so much relief. On the 20th, I applied them for the last time, the patient going into the country next day, with the breast everywhere nearly as soft as the other, and the milk flowing very freely. I should add that, on this day, I lanced a small superficial abscess on the axillary edge of the breast, which had been observed since the second day of the application of the sponges, letting out only half a drachm of matter. There was no bad effect whatever upon the pulmonary disease. If there was any collection of matter in the substance of the breast, it had become absorbed.

In this case the sponges used were not compressed, but were applied after being wrung out of water, and subsequently saturated. They are not quite so conveniently applied as when compressed, and the pressure cannot be so equally made; but they will probably answer pretty well under some circumstances.

The secret of the efficacy of the sponges consists, it seems to me, in three things:—1. They enable us to apply uniform, and at the same time gentle, pressure. 2. They have all the emolient effect of a poultice. 3. They absorb the matter or milk discharged, and promote its flow by capillary attraction.

It is proper to add that I have occasionally, in all these cases, used tents for a day or two to keep open wounds which showed a tendency to heal before it was desirable. A bit of sponge answers admirably for this purpose.

There can be no question, I think, of the superiority of the mode of treating breast abscesses, which is here described, over the old methods by the stimulating injection, the perforating seton, and the large and deep incisions. The profession must decide also whether it is not also better than that of M. Chassaignac. Let us compare the advantages and disadvantages of the two methods:—

1. The method by occlusion produces obliteration of the cavity in one or two days in the superficial abscesses. Our method does the same. Here we are equal.

2. The daily injections of tepid water, and the applications of the cupping glass are attended, according to M. C.'s own statement, with very severe pain, rendering the administration of chloroform almost indispensable. Our method is attended with no pain whatever, so far as I have seen; but, on the contrary, with an immediate sense of comfort and relief. (I attribute the pain which existed, for a short time, in some of Dr. Johnson's cases, to his having employed cold instead of tepid water in moistening the sponges.)

3. The method of M. C. requires the use of apparatus not always at hand; the irrigator, the hydrocele syringe, or the "*sonde a injection recurrente,*" the cupping instrument, etc. We require nothing but sponges and bandages.

4. The French surgeon is obliged, occasionally, to resort to the perforating seton. With us this has not been required, nor have we thus far been obliged to make even a counter opening.

5. It has never been found necessary with us to confine the arm, though perhaps that would still further accelerate the cure.

6. The average duration of the cases of deep-seated abscesses is considerably reduced by our method.

We have little or no information, in M. Chassaignac's reports, in regard to the secretion of milk. In all the cases above related it was preserved or restored.—*New York Journal of Medicine.*

## *A Case of Loss of Nearly Half of the Bones of the Skull, with Exposure and Sloughing of a Portion of the Brain.* By WM. W. RUTHERFORD, M. D., of Harrisburg, Pa., and H. SEAMAN, M. D., of Millport, Chemung County, New York.

[We are under obligations to Drs. Rutherford and Seaman for the following account of one of the most remarkable cases on record, of injury to the head involving the brain. For interesting details of other cases of extensive injury to the brain, the inquiring reader is referred to the 5th vol. of the REPORTER, pp. 329, 351, 371.—ED. MED. AND SURG. REP.]

On the morning of the 23d July, about three o'clock, I was requested to visit Mr. Edward Thomas, at Highspire, a village on the Pennsylvania Canal, six miles east of Harrisburg, who was said to be seriously injured by his head striking against a canal bridge whilst asleep on the deck of his boat.

I reached Hillspire about 4½ o'clock, and found Mr. T. in bed, his hair filled and matted with blood, his vest, shirt, upper part of his pantaloons and bed saturated with it, and a horrible looking rent in the scalp from the right superciliary ridge to the occipital bone. The wound was filled with coagulated blood, which stood up high above the level of the surrounding parts, and some blood still oozed from the wound. In a cloth, on a bench on the opposite side of the cabin, was rolled up a portion of the malar bone, some fragments of the os frontis, and the entire right parietal, detached from its fellow along the sagittal suture, and from the occipital along the lambdoidal suture, or perhaps taking some part of the occipital bone with it, together with the squamous portion of the temporal bone. It was as clear of soft parts as if it had been removed from the dead subject with scalpel and saw.

His pulse was small, moderately frequent, and rather feeble; skin rather below the natural temperature, but not much. Said he did not suffer much pain. His mind was perfectly undisturbed, quick and vigorous. I asked him if the sight of the right eye was impaired; he closed the left with his hand and said the vision of the right eye was perfect. He had no feeling of faintness, sickness of stomach, or any symptoms of concussion of the brain. The diminished force and volume, and increased frequency of the pulse were, I think, owing entirely to the loss of blood.

I suggested to Dr. Putt, who was in attendance with me, that it would be very difficult to dress the wound in the position in which Mr Thomas was then lying. Mr. Thomas said he would sit up, and immediately got up and seated himself on a chair in the middle of the cabin floor.

We removed the hair an inch and a half or two inches from each side of the wound with scissors, and then shaved the scalp with a razor. I then examined the wound with my finger, and found two loose pieces of bone about the superciliary ridge, which I removed. I then took a pocket-case spatula and commenced at the posterior angle of the wound, and removed a sufficiency of the coagulum to allow the edges of the scalp to be brought together by suture, then proceeded to remove some more and introduced another stitch, &c., until I had the wound in its whole extent very nearly brought together. In the clots which I removed I did not discover any discharged brain, nor did I get a sight of the membrains of the brain, for I was apprehensive if I removed the coagulated blood entirely that fresh hemorrhage would ensue. Indeed I concluded the less the brain was meddled with in that unprotected state the better.

The dressing occupied an hour or more, at the end of which he rose to his feet and removed his vest and shirt and put on a clean one; he then took off his pantaloons, and being handed a clean pair, poised himself on one foot and thrust the other into the leg of the pantaloons, changed feet, and thrust in the other leg, drew them up, buttoned and adjusted them with care, just as if nothing had happened to him, and walked over to his bed and laid himself down. He was not aware he had lost so much bone, or perhaps any, for it was concealed from him.

About 6½ o'clock I left him after applying a wet towel to his head, and at ten o'clock saw him again in company of two of our Harrisburg physicians, as the boat passed through the locks at this place.

Considerable reaction had occurred; his pulse was full, tolerably strong and about 80; skin warm, mind clear, but little pain, scarce any drowsiness, and his feelings he said quite comfortable.

If it were not for the fact that two physicians of this place, and Dr. Putt, of Highspire, have seen the patient, together with Dr. Seaman's letters, I should doubt the propriety of publishing it in a respectable medical journal, for really it is almost too marvelous for belief. Here is a man with nearly half of his skull torn away without any cerebral disturbance whatever, indeed without any symptoms to indicate the injury he has received except the torn scalp and the hemorrhage. Thus I concluded a hasty but truthful statement of the case as it came under my observation.

Since the accident, I have learned that it was produced by the end of one of the suspension rods which holds the string-pieces to the arch, the end of which projected below the timbers.

The boat was a very large one, used in carrying down coal, was returning empty, and floated very high, which accounts for the disaster.

Montoursville, July 30, 1857.

Dr. Rutherford—

Dear Sir: My brother-in-law, Edward Thomas, the boat captain whose head was so seriously injured by a bridge with so much loss of the bony structure, which was dressed by you on the morning of the 23d inst., near Harrisburg, requests me to write to you, and inform you that he is still living, and in full possession of all his mental faculties.

The dressing has not been removed from the wound, but he is apparently doing well. He sleeps comfortably during the night and occasionally during the day. His appetite for food is good, and he complains bitterly of the low diet to which he is subjected. Pulse ranges from 70 to 78, soft, and circulation equal. No preternatural heat of the skin. Complains of some dull pain in the head, helps himself up with ease, but when he starts up suddenly, as he sometimes does, from sleep, there will take place immediately considerable hemorrhage from the wound. On the whole he is very comfortable and hopes are beginning to be entertained by his friends of his ultimate recovery.

I have practised medicine and surgery twenty-six years of my life, and had supposed that I had witnessed almost every form of human injury and suffering, but never before have I met any injury which would compare with this, and the patient so long survive after its infliction. For your gratification (as I presume you did not measure) I will give you the actual measurement in a straight line across the concave surface of the piece of skull broken out, which now lies before me. You will recollect it was of an oval form, and I find it measures 6¾ inches in its longest diameter, and 5¾ inches in its shortest diameter.

With such a loss of the bony covering of the brain and the violence of the blow necessary to remove it, the great wonder is that the patient is still alive and comfortable, on this, the eighth day after the accident.

Yours truly, H. SEAMAN.

Montoursville, August 5, 1857.

Dr. Wm. W. Rutherford—

Dear Sir: Your very obliging letter of the 2d inst. is received, and it affords me much pleasure to comply with your request to keep you informed of Edward Thomas' condition.

This is the thirteenth day since he received the injury, and strange as it may seem he is doing well. During the first ten days succeeding the wound, there was considerable and frequent returns of hemorrhage from it, which would occur on almost every effort to sit up or even turn over in bed, but was readily arrested, in most instances, by the more frequent application of ice water. Since suppuration has commenced the bleeding has ceased.

I removed your dressing on the eighth day, and found the sutures all sloughed out, and no union of the wound by the first intention. The edges of the wound were widely parted, the scalp hanging in a fold over the ear, leaving a portion of the surface of the brain the length of the wound and one and one-half inch wide exposed to view. I have since, and with much difficulty, shaved off the entire scalp and brought the edges of the wound nearly together by adhesive straps, supporting them by the application of a bandage to the entire head. The tightness of these dressings was made to depend on the feelings of the patient. Suppuration is gradually going on, and granulations forming over the surface of the dura mater. All his symptoms at present are favorable. Intellect perfect, appetite good, pulse varying from 76 to 90 in a minute, tongue clean, skin nearly natural, strength holds out well, sits up occasionally from one to two hours at a time, and his friends are beginning to entertain a hope of his ultimate recovery. The cold wet cloths are still applied, as they have been faithfully from the first, to the preserving application of which I think he owes his life, and the comparatively comfortable condition he now enjoys. You will please accept the thanks and the gratitude of the patient and his friends for your skilful and persevering effort to save the life of this young man in one of the most hopeless conditions ever falling under the notice of the medical profession. I shall be much obliged not only to you, but Dr. Butler also for a copy of the number of the Reporter containing a notice of this case. I will endeavor to keep you posted in reference to its progress.

I remain yours truly, H. SEAMAN.

MONTOURSVILLE, August 8, 1857.

DR. WM. W. RUTHERFORD—

DEAR SIR: Again I write to inform you of Edward Thomas' condition. Since I wrote to you last he has been improving rapidly. I have just finished dressing the wound, and find the floating scalp firmly attached to the dura mater in every part, and covered by it, except the exposed portion, a strip three-fourths of an inch wide by six inches long, and this is entirely covered by strong and healthy granulations. I have continued to dress the wound with long adhesive straps, keeping it clean by the use of a sponge and warm water.

He does not complain of as much pain in his head and ears as formerly, and sits up in a chair two or three hours per day. His appetite is good, rests well at night, and has been walking about the house this afternoon without much apparent fatigue. At present he is recovering very fast, and if no unfavorable change should take place, he will soon be quite well.

In a former statement which I made to you in reference to the amount of skull bone broken out, I committed an error by not having compared the portion broken out with that left. I there said "nearly one-third of the entire skull is broken out," but should have come nearer the truth, had I said nearly one-half instead of saying one-third. I had forgotten to mention above that his intellect remains undisturbed, that considerable of the lower portion of the right front lobe of the brain was so injured that it has sloughed away.

This case presents considerations for the physiologist and phrenologist, some of whom may jump to the conclusion, that men, in this fast age, do not require such cumbrous bony structures, filled with so much chaff called brains, as many of us carry on our shoulders.

I remain yours, &c., H. SEAMAN.

[*Medical & Surgical Reporter.*

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## *Pulmonary Consumption.*

1. *The influence of Sea Voyages and Warm Climates on the progress of Pulmonary Consumption.* By M. JULES ROCHARD.—The following conclusions are arrived at on this subject by Mr. Rochard, after a most elaborate investigation of the subject. His paper is published in the "Memoirs of the Academy of Medicine of Paris," for 1856, and is an "ouvrage couronné dans la séance publique du 11 Décembre, 1855."

1. Sea voyages accelerate the progress of pulmonary tuberculization, much more frequently than they retard it.

2. This disease, far from being rare among marines, is, on the contrary, much more common among them than in the land army. It prevails with equal intensity in the hospitals of our ports, in our stations, in our fleets. The "officers de marine," the physicians, the commissaries, all who are afloat, in a word, are subjected to this general law.

3. With rare exceptions, which must be admitted, considering some facts recorded by men of credit, phthisis advances on board ship with more rapidity than ashore.

4. The naval profession should be interdicted, in the most decided manner, to all youths who appeared to be menaced with phthisis.

5. The consumptive can get no advantage from sea voyages, except they be on board under certain special hygienic conditions, and change climate and locality according to the seasons and atmospheric vicissitudes; things which cannot be realized on board of ships with a mission to fulfil. Journeys by land, and prolonged stay in a well-selected country, allow of all the same objects being attained, with much less expense and danger.

6. Warm countries, taken as a whole, exercise an injurious influence on the progress of pulmonary tuberculization, and accelerate its course.

7. Those situated in the torrid zone are especially injurious, and stay there should be formally interdicted to the phthisical. The opinions of the physicians-in-chief of our colonies, and of the English colonies, comparative statistics of colonial and of European regiments in the two sets of countries, the frequency of phthisis in our tropical stations, and in those of England in the same latitudes, and a multitude of special observations, demonstrate this completely, and the examination of each particular locality confirms it.

8. Most hot climates, situated outside of the torrid zone, are equally injurius to the tuberculous. Some points on the confines of this region, and concentrated in a narrow space, are exceptions. This is owing to local conditions. To sojourn in them protects the phthisical from acute affections of the respiratory passages which accelerate the progress of tuberculization, permits a mode of life better adapted to keeping up the general strength, prolongs existence sometimes, and contributes always to a more easy termination of the same.

9. It is in the first stage of phthisis that there is any hope from emigration, and any reason to expect good results from it.

The localities to be recommended to the consumptive M. Rochard divides into four series, according to their respective advantages:

1. Madeira. 2. Hyères, Venice, and Pisa. 3. Rome, Nice, of which the reputation is constantly decreasing. 4. Menton, Villa Franche, Bay of Spezzia, Lake of Como, the Balearic Isles, the Shores of Greece, the North of Egypt, Algeria.—*Abs. Med. Sci., from Edin. Med. Jour.*

2. *Outline of Hygienic Code for the treatment of Consumption.* By BENJAMIN W. RICHARDSON, M. D., Physician to the Royal Infirmary for Diseases of the Chest. (*The Journal of Public Health, Abst. Med. Sci.*)

In giving the following rules, Dr. Richardson presupposes their general applicability to cases of consumption in all stages of the disease: in the premonitory stage; in the stage where the tubercular disposition is apparent; and in the next stage, when the local mischief is much further advanced. In the last stage even, though hope is lost, many of the rules may still be rigidly followed out with advantage, for by them the course of the disease may be smoothed, and life, perhaps, prolonged.

The Rules are ten in number.

RULE 1.—*A supply of pure air for respiration is the first indication in the treatment of the consumptive patient.*

No cosy room with a temperature of 70°, with every crevice closed, and in an atmosphere in a dead calm and laden with impurities, should be permitted. A temperature from 55° to 65° Fahr. is high enough. The fire, if one be wanted, should be in an open grate, and every arrangement should be made by which the freest possible current of air should be kept circulating through the room. If the patient is cold, he must go near the fire, and, if necessary, poke it, but he must on no account make the room warm by making it close. Dr. Richardson objects very strongly to stoves of all kinds, to heated pipes, and to every other mode of supplying warmth, except an open fire, as by these means the air is made too dry. Among other disadvantages attending the inhalation of too dry air, is hæmoptysis, and a case is mentioned in point. "A gentleman whom I knew, and whose lungs were free from tubercle and other organic disorder, was constantly annoyed and troubled with slight attacks of hacking cough and blood-spitting. He was at a loss to account for the cause. At last he detected that the attacks always commenced when he was at work in his study. With the idea of being very warm and comfortable, and ignorant of the nature of animal heat, he had introduced into a small room a large Burton's stove. To a stranger entering that room when the stove was in action, and the doors and windows snugly closed, the heat and dryness of the atmosphere would have been at once oppressive; but he, a close student, and constantly occupying the room under such conditions, had become accustomed to it as regards external sensation, but caught the mischief effectually in the chest. The cause of the symptoms being explained, the stove was abandoned, and the open fire-grate was again resorted to: the cough and blood-spitting at once disappeared without the administration of any medicine. A few weeks afterwards, thinking that the stove and the cough might only stand in the position of coincidences, our student resumed the use of the stove; and what is more, resumed also, as an effect, the cough and the blood expectoration. This time he became assured that the stove and the cough stood in the relation of cause and effect. The cause was once more removed, and ever since he has remained free of the effect." Free ventilation is especially necessary where gas is used. The bed-room should be large—including, if practicable, not less than 1000 cubic feet of breathing space; and, to prevent any unnecessary contamination of the air, no second person should sleep in the same room, and no light, particularly gas, should be burnt through the night. Two persons in one bed, according to Dr. Richardson, are out of the question under any circumstances. The inclemencies of the weather are not so much to be dreaded as confinement to the house. "I had occasion, some time since," says the author, "repeatedly to remark that if, from a few days' rain, the consumptives under my care were confined to their houses, instead of being able to take the daily out-door breathing always prescribed, the aggravation of the symptoms was always marked and universal. The appetite fell off, the debility became greater, the mind was less bouyant, the local mischief increased." Better go out with respirators and mufflers, under ordinary circumstances, than stay in. A muffler, which a patient may make for a few pence, being as good as any expensive respirator. This is made out of a piece of fine wire gauze, cut oval, so as to cover the mouth and nose, and fixed in the centre of a hankerchief, so that it may be tied on like an ordinary comforter, with the gauze in the centre, for breathing through.

The want of pure air is thought to be an objection to hospitals for consumption. Dr. Richardson admits "that a vast deal of good is, or may be, done at these institutions by the treatment prescribed by the physicians who attend at them, and whose lives are devoted to the study of the disease, there cannot be a doubt. But that it is either physiological, or sound practical treatment, to receive into these buildings consumptive patients, is an assumption I most earnestly dispute. I know the excellent spirit in which institutions of this kind are founded. I am fully aware of the care that is bestowed on the inmates; of the attempts that are made to introduce every hygienic improvement; of the order and cleanliness that prevail; of the kindness of the attendants; of the excellence of the diet-rule; and of the skill of the physicians.

"With all this, it is to me as clear as crystal, that to bring phthisical patients into such institutions is a great charitable mistake. The very care, and waiting-servant attention, that is paid to such of the invalids as are in the first and second stages of the disease, is a cruel kindness. The remedy for them is to encourage and urge them to assist themselves and to exert themselves. Moreover, no kind of hygienic system, carried on in a large building filled with inmates, can make the air of that building in any way equal to the outer air, which it is so necessary that the consumptive person should breathe. Twenty patients, lying in one hospital ward, will throw off per minute into the air of the ward at least three and a half cubic feet of expired and impure gases, rendered in the phthisical the more impure by the pathological condition of the lungs. But the impure air thus exhaled vitiates by its diffusion twenty times its own volume of pure air; so that, in fact, in a ward with twenty patients, there are not less than seventy cubic feet of air spoiled per minute, and rendered unfit for the purposes of life. It may be granted that during the day, when the wards are less full, and many windows are open, and the movements of the inmates are active, the expired air may be fairly disposed of. But take a winter night of twelve hours; consider that in this period of time the twenty patients would, if they exhaled even naturally, vitiate fifty thousand four hundred cubic feet of air, which ought to be removed, and to be replaced by two thousand five hundred and twenty cubic feet of *pure* air for the use of respiration; and then reflect whether it is probable that such a ward can remain during the whole night uncontaminated. For, granting to the twenty patients a breathing-space of twenty-six thousand cubic feet, and even then it would require that the whole of the air in that space should be removed and replaced by fresh air fully twice in the one night. Against this, possibly, the artificial ventilating argumentists will urge that such a feat of ventilation is nothing at all, not worth considering, so easy to be done. M. Grouvelle would probably undertake to effect such interchange eight times in the night, or more; and if he undertook to do it eighty times, and did not succeed in doing it once, it might be difficult to prove the fact against him. But if he would take a strip of paper prepared for ozone, place it in a ward, however artificially ventilated, and place another similar paper in the open air adjoining the ward, it is a mistake if he should not find that there was a striking difference in the process of oxidation in the two localities; and that the great life supporter, oxygen, was in a condition to play a very much more active part in its outdoor than in its indoor work.

"The misfortune of a great hospital, with all its rooms communicating indirectly with each other, that the ventilation is always uncertain. There is, in fact, no properly ventilated space except the great vault of heaven, and no true ventilating power except in the combinations of atmospheric pressure, wind movements, and the force of diffusion.

"If special hospitals for consumptives are to be had, they should be as little colonies, situated far away from the thickly populated abodes of men, and so arranged that each patient should have a distinct dwelling-place for himself. They should be provided with pleasure-grounds of great extent, in which the patients who could walk about should pass every possible hour in the day; and with glass-covered walks overhead, where they could breathe open air, and yet be dry, even if rain were falling. Very expensive such an establishment would be, there is no doubt; but it would, I take it, be infinitely more particularly advantageous to treat ten patients in this manner, than ten tens in a confined brick-and-mortar box, through which of necessity some amount of invisible impurity, some trace of transparent poison-cloud, is constantly floating.

"The strongest argument in favor of consumption hospitals, is, that they receive those members of the community who could not at their own homes afford the same advantages as are supplied to them in the charity. Against this it is to be urged that the patients taken into the consumption hospitals are *not*, in this country at least, in any way to be considered as the representatives of the most needy and destitute sections of the community. These latter go to their last homes in the work-houses, or in their own poverty-stricken dwellings. The classes that fill the hospitals are often many grades above destitution; and are sometimes comparatively wealthy. They have access to a governor, who gives them an admission letter, and they leave their own medical adviser to enter the hospital, not because they cannot find the means to live at home and to be treated at home, but because, catching at every new suggestion offered to them, they set their hearts on getting into the hospital as though it was a certain haven of rescue. In this scramble after admission some of the course succeed; they leave their homes, they enter the hospital, and there the greater proportion of them either die or return back to their friends nearer death than before. A few recover or are relieved; but whether the same result would have occurred, if they had been subjected to the same medical and general treatment out of the hospital—is a question which may be very safely answered in the affirmative."

**Rule** 2.—*Active exercise is an essential element in the treatment of consumption.*

"Next to a free exposure to air, Dr. Richardson agrees with Drs. Rush, Jackson, and Parrish, in thinking that vigorous exercise is by far the most efficient remedy in the treatment of consumption. "Walking," he says, "is the true natural exercise, and the best, for it brings into movement every part of the body more or less, and, leading to brisker circulation in every part, causes a more active nutrition generally. The extent to which exercise should be carried will vary with the stage of the disease, and temporary accidents may stop it altogether, such, for instance, as an attack of hæmoptysis. But when exercise is advisable, the general rule is to recommend that it be carried out systematically, cautiously, and courageously, and that such exercise should be continued until a gentle feeling of fatigue is felt through the whole muscular system. Violent and unequal exertion of the upper muscles of the body is unadvisable. When restored from the fatigue of one exertion, another should be undertaken, and during the day this cannot be too often repeated. If the day be wet, then the exercise should be effected by walking in a large room, or by engaging in some game, such as skittles, billiards, or tennis.

If, in his waking hours, the consumptive patient can keep himself occupied pretty freely in muscular labor, he secures the best sudorific for his sleeping hours that can possibly be supplied; for as the cause of force is always expended in producing motion or action, so, to use the words of Dr. Metcalf, 'the proximate cause of sleep is an expenditure ef the substance and vital energy of the brain, nerves, and voluntary musclues, beyond what they receive when awake; and the specific office of sleep is the restoration of what has been wasted by exercise.' Cough is very much less frequent in the course of the night in him who has been subjected to exercise in the day; while sleep, when it falls, is more profound, and more refreshing.

"In summer time, when the temperature of the day is high. the morning and the evening time are the best adapted for the periods of outdoor exertion. In the other seasons, mid-day is preferable, as a general rule.

"I have sometimes been asked whether what are called gymnastic exercises are commendable in consumptive cases, and whether swinging is good. My idea on these points is that, in swinging, a person is much more usefully exercised when throwing the swing for his associates' pleasure, than in being swung. There is, in fact, but little faith to be placed in so-called scientific gymnastics. Anything that a man invents to overtop or compete with nature must need be paltry. Brisk natural movement of the limbs is all that the consumptive requires. He need not go out of his way after a sham, in the shape of shampooer; chopping wood is a good gymnastic feat, and playing at skittles is perfect in its way.

"The value of exercise is threefold. First, it checks waste of muscular structures, for muscles left inactive undergo a consumption, without any necessity for lung disorder. Secondly, it diverts the blood from the lungs, causes a more brisk circulation through them, and a more free distribution through the system at large. Thirdly, it induces a more free respiration; more oxygen is taken into the lungs, the body is restored to its vital purposes more surely, and, just in the proportion as this restoration is effected, so is the restoration of disordered function and of disorganized tissue.

"In the performance of muscular exercise let the consumptive never encumber himself, or check the free movements of his body by strappings, loads of clothes, or carrying of weights, and the like. These are but tasks; they lead to unequal exertion in special sets of muscles, and such inequality of expenditure is that which is to be avoided. The treatment of consumption in an hospital is objectionable, again, in regard to exercise. Of what use to the consumptive is an acre or two of airing-ground confined at the back of his hospital? Let him be certain that where the gardener cannot make roses bloom, and peach trees blossom, no doctor can give to the anæmic cheek a permanent color, to a lost function its uses, or to an impoverished body its once healthy power.

"A last consideration on the value of muscular exercise is, that it is eminently useful in keeping the respiratory muscles in a state of active nutrition. For, if to the loss of capaciousness in the lungs to receive air, there is added a daily increasing failure in the muscles by which the acts of inspiration and expiration are carried on, it is clear that a double evil is at work. Now this double evil is most actively presented in consumption. As the respiratory muscles, together with the other muscles, lose their tone, so do the general symptoms of exhaustion increase in severity; sometimes without very marked change in the pathological condition of the lungs. As a sequence, day by day, as the nutrition of these muscles decreases, and as they fail in tonic contractile power, they gain in excitability; so that the irregular spasmodic contractions to which they are subjected in the act of coughing are produced by the merest excitement, and the cough is more frequent as it becomes more feeble.

Rule 3.—*A uniform climate is an important element in the treatment of consumption.*

No particular place is recommended for consumptives, but here is the formula for an hypothetical consumptive Atlantis. "It should be near the sea-coast, and sheltered from northly winds; the soil should be dry; the drinking water pure; the mean temperature about 60°, with a range of not more than ten or fifteen degrees on either side. It is not easy to fix any degree of humidity; but extremes of dryness or of moisture are alike injurious. It is of importance in selecting a locality that the scenery should be enticing, so that the patient may be more encouraged to spend his time out of doors in walking or riding exercise, and a town where the residences are isolated and scattered about, and where drainage and cleanliness are attended to, is much preferable to one where the houses are packed, however small its population may be."

Rule 4.—*The dress of the consumptive patient should be adapted to equalize the temperature of the body.*

Rule 5.—*The hours of rest of the consumptive patient should extend from sunset to sunrise.*

This rule, in Dr. Richardson's opinion, is imperative for many reasons. "First, because in all seasons the actual amount of rest required by the natural man is pointed out with the precision of an astronomical law by the course of the sun. In midwinter men require, for physiological reasons, more sleep than they do at midsummer, and just so much more as is indicated by the difference of night in these two periods. Observe how all animals, left to their own natural instincts, obey this law. Secondly, in our present artificial mode of life, we have to extend the day by the invention of artificial lights. But whenever a man shuts himself up in his closet, and makes a little sun out of his gas-lamp or candle, he is feeding that lamp with part of his own breathing store—the air around him. Worse still, the candle can, no more than the man, live alight without exhaling carbonic acid gas, and thus vitiating the atmosphere. A pound of oil burnt in a lamp produces, in burning, nearly three pounds; and every cubic foot of coal gas, rather more than a cubic foot of carbonic acid. The evil effects of carbonic acid on the lungs have been already described. Thirdly, as an artificial light is, by the mode in which it is produced, of necessity injurious, so, on the contrary, the pure sunlight is of the greatest worth in the acts of vitality. What sunlight does in a physiological way is undetermined; but its general influence has long been known and recognized. Plants banked up from light become blanched, and human beings kept for a long time in dark abodes become the victims of anæmia and scrofula.

"Thus, to fulfil the natural law regulating the times of sleep, to escape from the artificial light, and to obtain the advantage of all the sunlight that can be secured, the consumptive patient should make the sun his fellow workman.'' But is not this going a little too far? Must the consumptive patient remain eighteen hours in bed in the shortest days of the year, and keep out of bed for the same period in the longest days? and ought the valetudinarian Laplander to remain in bed during his long winter, and to keep up throughout the entire summer? Surely not; and yet, upon this principle, he ought to have no alternative.

Rule 6.—*The occupation of the consumptive patient should be sus-*

***pended if it is indoor or sedentary; but a certain amount of outdoor occupation may be advantageous.***

Among other remarks which naturally arise when speaking upon a rule such as this, is one which deserves considerable attention. It this: "In the case of parents having children of a consumptive tendency, therefore, the greatest care should be taken to obtain for them outdoor employment. But here a serious delusion comes into play. If the child is weakly, the fond parent urges, that it is unfit for hard labor and for outdoor vicissitudes; so it is sent to a tailor or shoemaker, to a clerk's office, a draper's shop, or to some occupation of an indoor character; by this grand, ignorant, and fatal mistake, it is added to the list of the two-thirds who swell the tables of consumption cases."

RULE 7.—*Cleanliness of body is a special point in the treatment of consumption.*

RULE 8.—*Marriage of consumptive females for the sake of arresting the course of the disease by pregnancy is morally wrong, and physically mischievous.*

RULE 9.—*The diet of consumptive patients should be ample, and should contain a larger proportion of the respiratory elements of food than is required in health.*

RULE 10.—*The medicinal treatment of consumption should in the main be of the tonic class.*

There is no doubt, as Dr. Richardson says, that the public expect to be cured by pills and plasters, and not by a series of instructions tending to bring men into obedience with the laws of nature, and therefore much credit is due to him for constructing this decalogue, even though subsequent inquiry may lead him to modify some of its articles.—*N. O. Med. & Surg. Journal.*

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*The Excito-Secretory System.—Dr. H. F. Campbell—Marshall Hall—Alleged Priority of Discovery.* By J. ADAMS ALLEN, A M., M. D., Formerly Professor of Therap., Mat. Med. and Juris. in the Indiana Medical College; and late Professor of Physiology and Pathology, and acting Prof. of Mat. Med. in the University of Michigan.

It appears from a late number of the London Lancet that M. Hall recognizes to a certain extent the priority of Dr. Campbell. His words are these:

"I arrive at this conclusion: the idea and the *designation* of an excito *secretory* action belongs to Dr. Campbell, but his details are limited to pathology and observation. The elaborate experimental demonstration of reflex excito-secretory action is the result of the experimental labors of M. Claude Bernard.

"My own claim is of a very different character, and I renounce every other. It consists in the vast *generalization* of excito-secretory action throughout the system.

* * * * * * *

"I trust Dr. Campbell will be satisfied with my adjudication. There is in the excito-secretory function, as applied to pathology, an ample field of inquiry for his life's career, and it is indisputably—HIS OWN. He first detected it, gave its designation and saw its vast importance."

M. Hall thus far, freely and fully admits the priority of Dr. Campbell, and the latter gentleman bases his claim upon the date, May, 1850.

I shall undertake to show that this same doctrine was FIRST publicly announced and illustrated in my lectures at the Indiana Medical College in November 1848, and thenceforth continuously during the continuance of my public teaching before the several classes of that College, and also the medical classes of the University of Michigan until my connection with that institution "expired by limitation" in 1854. My own manuscript, containing this doctrine, was written in May or June 1848.

In proof of this proposition I shall adduce the ancient manuscript which I have fortunately the means of proving as to date, in the most satisfactory manner; and, secondly, the evidence of students then in attendance upon my lectures, and now some of them occupying high professional positions.

As the lapse of years has scattered the various classes throughout different sections of the country, and the addresses of but few are now known to me, I would crave permission to take this mode of inviting all graduates or students of the Indiana Medical College during the session of 1848–9, and 1849–50 to forward me their present P. O. address, that my claims may be fully substantiated by their evidence.

Of this one thing I am fully convinced, that the enunciation of the Excito-Secretory principle as *new*, will fall upon the ears of such students as have from time to time listened to my lectures, with something like astonishment.

The manuscript itself was never more than a text to extended explanatory remark upon the subject.

I do not claim the nomenclature "Excito-*Secretory*" as invented by me, and shall take occasion in the proper place to remonstrate against the limitation of the great phenomena involved, by this merely arbitrary term. Analogically it is convenient in contradistinction to the term excito-motory, but mere analogy too often leads us into error to be a safe guide, even in nomenclature.

What I do claim—*is the great generalization, that the excito influence is followed by a reflex change in which the effect is* NOT A MOTION *but* A MODIFICATION OF VASCULAR AND UTRIENT ACTION. *That this effect takes place* BY MEANS OF THE DOUBLE NERVOUS ARC. A vast number of therapeutic phenomena are thus explained.

As M. Hall is kind enough to allow Dr. Campbell the credit of having discovered the "excito-secretory function, as applied to pathology," perhaps he may be led to recognize my own claim to the discovery of this principle as applied to *therapeutics*. I shall not be content with this.

In my course upon "General Therapeutics" the subject of "Counter-Irritation" came under review.

After considering the numerous cases wherein nature seems to set up this process in the prevention of disease—or at least where when the external disease subsides, internal derangement quickly supervenes; which, again, is relieved by re-establishment of the external difficulty, (e. g. ulcers upon the legs, *fistula in ano*, otorrhœa, cutaneous eruptions, &c., &c.) I passed to consider the issue, seton, moxa, epispastic, &c.

After giving several hypotheses from various sources, of their action therapeutically, and particularly Eberle's view, the lecture proceeds as follows:

"This view," (Eberle's) "of the subject after all, that it is the most plausible one which has been given, is fraught with some difficulties. Why should a blister upon the thorax in pneumonia be more beneficial than one upon the arm? Or why should an epispastic over the abdomen in enteritis be preferable to one upon the thigh? The parts although nearer together topographically, are anatomically much farther apart. Hence, reasoning, anatomically, or from the distribution of the blood vessels, we should be inclined to reverse our application."

"But experience, in this instance, as in many others contravenes analogy, and to its mandates we must succumb. How is the anomaly to be explained?"

"Certainly not by Hunter's 'contiguous sympathy' for this explains nothing: there is no short cut passage between the outer vesicated surface, and the inner inflamed organ—neither by anastomosing vessels nor nerves."

"* Hence the impression MUST BE *transmitted to the nervous centres,*

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*Here is written upon the margin of the manuscript, "*Original Explanation.*"

*and thence reflected to the affected organ; in other words, the influence is primarily exerted upon the cerebro-spinal system, and secondarily upon the internal affected organ.*"

This is the gist of the whole matter, and the point consists in the recognition of reflex cerebro-spinal action which in the instances adduced give rise to a *molecular* or *integral* change in the inflamed tissue—and not a muscular contraction.

In the oral elaboration of this principle was suggested an idea which does not even now appear to have occurred to either M. Hall or Dr. Campbell, viz: *The motor effect is merely* SECONDARY, *and not a necessary part of the action of the nervous arc.*

The molecular or integral composition or decomposition at the distal extremity of the reflex nerve is the real element—the motion, secretion or change of vascular or nutrient action, production or abatement of inflammation or other change of the organ supplied by the nerve (reflex), being altogether *secondary or incidental.*

THE EFFECT IS MOTORY, IF CONTRACTILE FIBRE BE PRESENT!

THE EFFECT IS SECRETORY, IF SECRETING ORGANS BE SUPPLIED!

THE EFFECT IS SENSATION, IF SENSITIVE NEURINE BE REACHED!

THE EFFECT IS PERCEPTION, OR INFELLECTION, IF THE ORGAN THEREOF BE IN CONNECTION WITH THE REFLEX NERVE!

I have said that the term excito-secretory is objectionable; the term excito-motory is equally so. The terms "*external* and *internal* distaltic action," are equally so. Whether internal or external *the modus is the same.*

Heat will melt iron, explode gunpowder, harden clay and destroy or fix colors.

Are these several results indicative of any *diversity* in the force of heat itself? Are they not rather indicative merely of *variety in the bodies acted upon*?

So is it with the excitor force which commands the tiny fibrillæ and cells of the nervous arc. They receive and transmit but the *single impulse*—and in a *single* manner.

*The effect produced, then depends upon the* STRUCTURE AND CONDITION *of the organ reached.*

The single tubule or fibre of nerve may whilst conducting its peculiar impulse touch, here upon a muscular fibre and call its contractile elements into energetic action, and there upon a cell or group of cells and their growth, maturation and dissolution are hurried on; and so on through the category of vital changes.

But again, this influence *is* NOT *confined to the mere increase of action*, as the term EXCITOR might perhaps suggest.

The reverse may take place—the excitor may rather become the *depressor.*

It would be as correct to say the depressor-motory, the depressor-secretory, as to say the excitor-*idem.*

Physiology, Pathology and Therapeutics are full of illustrations of this fact.

The excito-secretory function is not in fact distinct from the excito-motory—neither is the depresso-secretory from the depresso-motory.

We might with equal propriety speak of a modification in essence of the electro-galvanic circuit when at one time, by ingenious mechanism, it is caused to print a telegram, and at another to decompose a mineral—at another to kindle the Drummond light.

The 22d of December, 1845, the Surgical Napoleon of America uttered these words in a lecture which now (as they did then), strike me as prophetic: "We have got to the end of the *vascular* system—and just beginning the *nervous* system."

It is useless to lumber up our already Babel-nomenclature with new and inexpressive barbarisms.

The terms excitor and depressor do not include the functions of the first arm of the nervous arc. Pathologists and therapeutists have been obliged to recognize something more than the mere increase or diminution of action.

*Qualitative* changes are fully as important, if not more so, than simple *quantitative* ones—and these cannot be properly designated by the terms proposed by Messrs. Hall and Campbell.

There is the recipient segment, the impressible centre, and the reflex conductor, in all the known machinery of the nervous tissue. The resultant effect depends upon the nature of the structure acted upon.

In this view how important is seen to be the material constitution of the parts acted upon.

The *vis nervosa*, or highest relation of force with which we are acquainted, has not to do with intangible things, but requires for its appropriate action the presence of particular material structures, of particular chemical compounds or elements, and a certain arrangement.

A clear comprehension of the phenomena of nervous action demonstrates the necessity of something more than shadowy remedies for existing derangements. But of this hereafter—that the limits of the present paper be not too greatly extended.

One thought more in connection with the views of M. Hall.

"There is" says he, "perhaps, not a point in the general cutaneous surface in which tetanus—an excito-*motor* effect—may not originate; there is scarcely a point in which internal inflammation—an excito-secretory effect—may not be excited."

Turn now to any late treatise upon the physiology of muscular contraction, and we find the doctrine of the inherent "irritability" of the muscular fibre—the nervous system merely calls this into action—as it does any stimulus tending to disturb its integral structure.

The reflected impulse disturbs the molecular structure and contraction results as it would from the application of a chemical agent or mechanical appliance. If continuous, inflammation or even destruction of the tissue may ensue.

Where is the line of demarcation between the two effects; or, rather, is there any such line or real distinction? Correctly speaking all nutrition is but secretion—all secretion is but nutrition. Contraction (and therefore motion) is but an incident in the nutrition or molecular change of muscle.

The nutrition of the liver or of any other glandular organ is precisely identical in its ultimate elements.

The nervous act is in each instance the same.

Where then is the assumed distinction?

It is perhaps safe to assume as probable that parts supplied with cerebro-spinal nerves, exhibit more definiteness in their reflex phenomena than those supplied mainly by fibres from the ganglionic chain. *But it remains to be proved that there is any more real difference between these two classes of nerve fibres, than exists between striated and non-striated muscular fibres.*

For the present I leave the subject by soliciting attention to the real point at issue, which is: that the afferent nerve, the central organ, and the efferent nerve constitute the true system: that the terms "excito-secretory and excito-motory systems" are ill-chosen and erroneous as respectively too limited in signification and tending to misapprehension of the real simplicity of the true system which I first publicly pointed out in 1848.

## LETTERS IN EVIDENCE OF THE NATURE AND DATE OF MY PUBLIC TEACHING.

(From Robert C. Kedizie, A. M., M. D.)

VERMONTVILLE, Mich. July 29th, 1857.

Dr. J. A. ALLEN.

DEAR SIR:—Your favor of the 23d was received yesterday, and I reply by first mail.

In reply to your inquiry, I would state that I remember distinctly the matter to which you allude. Your reasoning upon the therapeutic action of a blister in pneumonia (also of a blister to the abdomen in enteritis), I remember as distinctly as though I listened to you but yesterday. Your accounting for it by the double nervous arc—analogous to the excito-motory arc, I remember with equal distinctness; though I think you did not name it then the excito-secretory system. * * * I also remember your rejection of the proposition of "contiguous sympathy."

I could identify your manuscript lectures in any court of justice in the land. It would be impossible for them to be essentially altered and I not detect it.

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I should have noticed the injustice of Dr. Campbell's claim to priority, but the fact is &c., &c. (Here follow certain personal explanations unnecessary to the present purpose. A.)

Ever Yours Truly, R. C. KEDZIE.

[Dr. Kedzie was a member of the class of 1849 at Laporte, Ia., Medical College—afterwards a graduate of, and Demonstrator of Anatomy in the University of Michigan. Dr. K. had constant access to my manuscripts and took copious notes.]

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(From Joseph B. Hull, M. D.,)

LANSING, Mich., July 28th, 1857.

DEAR SIR:—I received yours of the 24th yesterday, and am glad of an opportunity of referring to the instructions received whilst I listened to your lectures both at Laporte (Ia. Med. Coll.) in '49 and Ann Arbor in '50. I shall not be under the necessity of referring to notes to refresh my memory upon most subjects treated of by you.

* * * * * * * *

In regard to the subject of controversy between Messrs. Hall and Campbell about priority in establishing the doctrine ef excito-secretory nervous action—if they cannot date back of 1850, they certainly cannot claim its introduction to the consideration of the profession, as you in your lectures at Laporte in 1849 avowed the principle in treating upon the subject of counter-irritation.

You then rejected the theory of "sympathy of contiguity" and attributed the effects of blisters upon the chest and abdomen in pneumonia and enteritis (as well as near other local inflammations) to the production of an internal change in the vascular and nutrient action similar to the excitor and reflex action of the nervous system, and I think you explained the phenomenon by reference to the double nervous arc. I hope you will succeed in placing the priority of broaching the above principle where it belongs.

Respectfully Yours, J. B. HULL.

[Dr. Hull can also identify the manuscript.]

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(From Charles P. Marsh, M. D.)

Holland, Mich., Aug. 2d, 1857.

Dear Dr.:—In reply to yours of the 23d ult.

I can identify your manuscript lectures as written in the spring and summer of 1848, and first delivered at the session of the Indiana Med. College 1848–9.

I remember distinctly your explanation of the action of counter-irritants by means of the double nervous arc. You rejected the theory of "sympathy of contiguity" and claimed as an original view the principle that their action was analogous to the excito-motory of M. Hall, but that the reflex effect was not a motion but a modification of the nutrition of the internal organ.

You gave many illustrations of this mode of action throughout the entire course.

The same doctrine was also taught by you in the University of Michigan, whilst I attended the sessions of '50 and '51, '51 and '52, both in connection with your lectures upon Therapeutics and Physiology. * * *

Yours Cordially, CHARLES P. MARSH.

[*Medical Independent.*]

# EDITORIAL AND MISCELLANEOUS.

Atlanta Med.
C'llge

## Commencement Exercises.

(Geo.)

The Course of Lectures in the Atlanta Medical College, closed on the 3d of September, with an appropriate and highly interesting valedictory address to the Graduating Class, by Thos. S. Powell, M. D., of Sparta, Georgia.

The degree of M. D., was conferred upon forty-six gentlemen, the majority of whom we are sure, will in their career, reflect credit upon the Institution, let their lot be cast where it may.

## Medical College of Georgia at Augusta.

Circumstances (unnecessary to detail) make it proper for us to say, that our relations with the Medical College of Georgia, are and have been, of the most friendly character, and in addition to this, it is with pleasure, that we would say to our friends, who design attending Medical Lectures, that they would scarcely do better than to spend the winter in Augusta, where they will find an institution of high, deservedly high, character, and with a Faculty, perhaps, inferior to none in the Union.

It is very true that the Institution is so well known that it needs no compliment from us, but to correct a misapprehension, we feel it to be our duty, in *simple justice* to the Institution, to say this much.

☛ Circumstances unavoidable and unnecessary to detail, have prevented the editors from giving the usual attention to the Journal, we hope to make amends in the future, asking the indulgence of our friends to any apparent negligence in this number.

## The Great American Medical Regulator.

WE believe it is generally understood that Dr. Bowling of the Nashville Journal is the *self constituted regulator* of the medical affairs of the United States of America.

We believe that it is equally well known that his Journal is, and has been, the continual vehicle for all manner of unjust and foul aspersions, directed against those who dared oppose his presumptuous claims. Under these circumstances, we hardly think it necessary to reply to the unprovoked *personal* discourtesy contained in his last number.

## American Medical Association.

THE Nashville Journal speaks of Dr's. Boring and Means, in an offensive manner, as the "preaching brethren" of the American Medical Association—please allow us to add that if we are correctly informed, there were no less than three other "preaching brethren," who were members of the Association and at the same time members of the Faculty of the Medical Department of the University of Nashville.

We wish it to be distinctly understood that it is not in an offensive way that we allude to this matter—we mean no disrespect to the "preaching brethren" of the *Nashville* Faculty; but we wish to call attention to the low resorts of the Editor of the Nashville Journal to bring into disrepute those he may wish to injure.

In reference to the insinuations of "cut and dried" and "preconcerted" arrangements, we would refer the Editor of that Journal to the *real transactions* of the nominating committee of the American Medical Association, and enquire if some extraordinary influence did not succeed in *instructing* every member of that committee (with one exception) to vote for a *certain* individual for the Presidency? and in addition to this, we would ask is it likely that this *unanimity* would have prevailed without some "cut and dried" or "preconcerted" arrangement? So far as the Georgia delegation is concerned, we shall not hesitate to say that the *instructions* to vote for Dr. Eve were given, in direct and positive opposition to the will of a large minority.

"These explanations are exceedingly unpleasant to us, but the unjustifiable and most extraordinary course" of the Nashville Journal, "has forced upon us the necessity of making them."

☞ As faithful Journalists we record the claim of Prof. J. Adams Allen to the discovery of the Excito-Secretory function. Whatever may be the facts in reference to priority upon this subject, Dr.'s Hall, Campbell and Allen, are each entitled to great credit for their investigations and discoveries in Physiological science, and neither, perhaps the less, on account of the labors and contributions of the others.

*Belladonna in Hooping Cough.* By Dr. L. Turnbull, (Pamphlet, Philadelphia, 1855.—* * * "In the twenty cases cured by the use of the Belladonna, the cough and hoop returned in a few cases on exposure to cold, or in disagreeable, windy weather; but, by combining the extract with syrup of ipecacuanha, a few drops soon checked the cough and hoop; in only one case out of this number was it complicated with inflammation of the lungs, and this case recovered. "The average duration of my twenty cases was ten days, after the hoop had commenced, when the case was free from complications, which shows the great advantage of this treatment. The ordinary duration of the disease, when treated in the usual manner, is from one and a half to three and a half months; even by prussic acid, or the application of Nitrate of Silver, the average is given from two to three weeks."—*Half Yearly Abstract of the Medical Sciences.*

*Bellevue Hospital.*—The extensive enlargement of the buildings occupied by this charity, are in rapid progress. For the present we learn that the lack of room for the inmates is sadly felt. Indeed, all our institutions are unusually full for the season. The Lunatic Asylum, on Blackwell's Island, is so filled, that an additional building has been occupied. The Alms House buildings, too, are crowded.—*The American Medical Gazette.*

## METEOROLOGICAL OBSERVATIONS FOR SEPTEMBER, 1857, AT ATLANTA, GA.

| SEPTEMBER. | THERMOMETER. | | | BAROMETER. | | | WIND. | REMARKS. |
|---|---|---|---|---|---|---|---|---|
| | 7 A. M. | 2 P. M. | 7 P. M. | 7 A. M. | 2 P. M. | 7 P. M. | | |
| 1 | 66 | 80 | 74 | 30.20 | 30.30 | 30.25 | E. | Fair. |
| 2 | 70 | 76 | 68 | 30.25 | 30.30 | 30.20 | E. | Fair. |
| 3 | 64 | 76 | 72 | 30.22 | 30.22 | 30.25 | N. E. | Fair. |
| 4 | 72 | 80 | 76 | 30.30 | 30.30 | 30.25 | E. | Fair. |
| 5 | 76 | 88 | 80 | 30 22 | 30 30 | 30.22 | E. | Hazy. |
| 6 | 68 | 86 | 84 | 30.20 | 30.20 | 30.15 | E. | Fair. |
| 7 | 72 | 86 | 70 | 30.27 | 30.20 | 30.20 | E. | Fair. |
| 8 | 70 | 76 | 72 | 30.25 | 30.32 | 30 30 | E. | Fair. |
| 9 | 72 | 76 | 76 | 30.30 | 30.27 | 30.20 | E. | Fair. |
| 10 | 58 | 80 | 74 | 30.15 | 30.20 | 30.12 | E. | Fair. |
| 11 | 72 | 80 | 70 | 30.20 | 30.15 | 30.07 | E. | Fair. |
| 12 | 62 | 88 | 78 | 30. | 30.07 | 30. | E. | Fair. |
| 13 | 64 | 88 | 86 | 30. | 30.05 | 30 02 | E. | Fair. |
| 14 | 68 | 88 | 86 | 30.10 | 30.12 | 30.15 | E. | Fair. |
| 15 | 78 | 90 | 82 | 30.15 | 30.15 | 30.12 | W. | Fair. |
| 16 | 80 | 94 | 84 | 30.12 | 30.20 | 30.15 | S. W. | Fair. |
| 17 | 76 | 92 | 80 | 30.06 | 30.20 | 30.12 | E. | Fair. |
| 18 | 70 | 80 | 80 | 30.10 | 30.12 | 30.06 | S. W. | Hazy. |
| 19 | 72 | 80 | 96 | 30. | 30. | 30. | S. | Cloudy—Rain ⅛. |
| 20 | 72 | 82 | 68 | 30. | 30. | 29.95 | W. | Fair. |
| 21 | 58 | 82 | 74 | 29.95 | 30.05 | 27.97 | N. W. | Hazy. |
| 22 | 58 | 76 | 60 | 29.95 | 29.95 | 29.90 | E. | Cloudy. |
| 23 | 56 | 70 | 58 | 29.95 | 29.92 | 29.90 | N. W. | Fair. |
| 24 | 52 | 76 | 70 | 30. | 30. | 30. | N. W. | Fair. |
| 25 | 52 | 70 | 70 | 30. | 30.05 | 30.10 | N W. | Fair. |
| 26 | 70 | 80 | 70 | 30.30 | 30.25 | 30.20 | W. | Fair. |
| 27 | 58 | 78 | 76 | 30.20 | 30.25 | 30.25 | W. | Fair. |
| 28 | 80 | 86 | 70 | 30.35 | 30.30 | 30.25 | W. | Fair. |
| 29 | 60 | 70 | 60 | 30.25 | 30.20 | 30.25 | N. | Fair. |
| 30 | 42 | 70 | 62 | 30.20 | 30.25 | 30.20 | E. | Fair. |

**Furnished by**

**J. G. WESTMORELAND, M. D.**

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# ORIGINAL COMMUNICATIONS.

## ARTICLE I.

*A Thesis on Vesico-Vaginal-Fistula. Presented to the Faculty of the Atlanta Medical College for the Degree of Doctor of Medicine.* By CAMILLUS HILLIARD, of Montgomery, Ala.

*Honored Sirs:* It has been aptly remarked, that this is an age of progress. In no department of science is this more apparent than in that of medicine. In the last half century, such gigantic strides have been made in this science, that contemplating what has been accomplished, we are astounded. Looking back to Hippocrates, the "Father of Medicine," we see this glorious and noble art, beginning as doth a rill in the far distant mountains, flowing on through succeeding centuries, it receives accessions from varied sources such as Italy, Persia, Arabia, etc. Now and then, its clear stream muddied by some false theory, but again becoming clear under the searching eye of science—damned up for awhile by the cursed dogmatism of Benedictine-Monks and like sects, but as the stream to which I have compared it, swelling and heaving until it removed the barriers opposed to it, always sustaining itself by its dignity and humanity. Until now instead of increasing by centuries, almost yearly new light is thrown upon it, and its waters begin to glisten under the halo science has cast over it.

You will not deem it strange, respected sirs, that I have made these general remarks, when you remember that until within the last five years the prognosis of Vesico-Vaginal-Fistula (the subject of my Thesis,) was universally considered unfavorable.

Reading the works of the older authors upon the subjects connected with Surgery, you would scarcely dream that a disease so painful and pitiable as this is in its consequences existed. One which so disfigures "the last, best gift of God to man," that instead of the feelings of unmitigated delight and respect with which we usually behold them, we feel only disgust and loathing, mixed in the humane person with a feeling, perhaps, of pity.

The older authors considering this affection as one beyond the reach of medical art or surgical skill, thought it a mere waste of time and display of ignorance, to say anything about it. Even in reviewing the written opinions of more modern Surgeons, we find that it is but recently, that any advance has been made, either in the treatment or proper understanding of it. It has been described, and modes of treatment proposed, but not much notice was taken of either. Within the last quarter of a century, however, several eminent Surgeons having turned their attention to it, it is with pleasure I state, there is scarcely any disease in the whole range of Surgery, more clearly understood or more easily treated.

I will now proceed immediately to the consideration of the subject.

*Anatomy.*—Between the bladder and anterior wall of the vagina, there is a small quantity of areolar tissue. The union of the two is called the Vesico-Vaginal-Septum, which is composed of muscular and erectile tissue, covered on both sides by mucus membrane. The shape of this Septum resembles somewhat a heart on playing cards, its base presenting upwards, the cervix uteri occupying the notch, the apex pointing downwards to the opening of the urethra.

The opening constituting the fistula may occur at any point, but is usually near the centre of the Septum. In the several cases I have had the fortune to see operated upon, the fistules were of various sizes and number, some patients having one, others two. The form is generally oval, though it may of course be any. The size varies from an ⅛ of an inch to 3 or 4; in fact, the whole Septum may slough away and allow the fundus of the bladder to protrude through, presenting the appearance of a large fleshy tumor.

The presence of more than one fistula, is a circumstance of considerable importance in reference to the chances of successful treatment. The reason of this is, that if there be more than one, dribbling of the urine is more likely to occur, and by its action, prevent the process of reparation.

*The Causes.*—These are various, such as impaction of the child's head during labor. The soft parts of the mother being grasped as in a vice, between the presenting part of the child and the bony walls of the pelvis, arresting circulation and causing the parts compressed to slough away. The misuse of forceps. Lithotomy performed through the vagina. Disease of cervix uteri, etc.

*Diagnosis.*—This is easy, the symptoms being few, but well marked. When it has followed tedious labor, retention of urine is first noticed, it being necessary to use the catheter for the relief of the bladder. It may continue for several days, from seven to twelve, and then be converted into complete incontinence, the sloughs having fallen, and a continued involuntary stillicidium being established. A probe being passed into the urethra will come into contact, through the fistula, with a finger passed into the vagina. A specular examination will prove with certainty the existence, shape, size, etc., of the fistula.

*Treatment.*—This can be embraced under two general heads, viz: Suture and Cauterization. Cauterization is divided into chemical and actual cautery. The former is applicable only in cases where the opening is small; it heals by granulation. The actual cautery cures by contraction of the cicatrix. It should be applied at a white heat for an instant around the edges of the opening. Some authors state that there should be from four to five weeks between each application; others, from two to three months, so as to allow the cicatrix full time to contract. From all that I can gather upon the subject, I do not like this mode of treatment, it being in my opinion, generally unsuccessful, the opening contracting to one or two lines in diameter, and then resisting all further attempts to close it. Liston, however, sanctions it, and he stands deservedly high in the ranks of Surgery.

*The Suture.*—There are numerous modifications of this, as the twisted, the plastic, the clamp, and the button suture.

The Suture had its origin in Germany. The name of the Physician who proposed its use has escaped my memory. It then fell into disuse, but was snatched from oblivion in the beginning of the present century. Since that time the suture has been employed in Germany in different forms, and in the hands of some has proven very successful. One of the most succcessful of their Surgeons joined puncture of the bladder with his operations, so that its contents might not retard the progress of recovery by their irritating influence on the raw edges.

Velpeau condemns the Suture in the heartiest language, and experience has proved unjustly. He winds up his remarks by saying that such a mode of treatment, appears to be calculated to have no other result than to cause unnecessary suffering to the patient.

In England, very little has been done to relieve this malady. The Suture has been employed there to some extent, but with variable success.

Coming now to the United States, I feel very much like devoting the rest of my pages to a eulogy on our glorious country. Knowing this would not be considered exactly "the thing," in an article of this kind, I will try to suppress my patriotic feelings, and content myself by saying, that in this, as in everything else, our countrymen have shown themselves the equals, if not the superiors, of phlegmatic Germany, polite France, and sturdy England combined.

To the names of Pancoast, Hayward, Sims, Mattaeur, Bozeman and some other American surgeons the world should be grateful, for they have placed the prognosis of Vesico-vaginal

Fistula on a par with diseases of like severity. Dr. Mattauer was one of the first who operated in this country; he first pared the edges of the opening and then introduced sutures of lead wire, and brought the edges together by twisting the sutures; he clips the wires just exterior to the vulva, tightens them on the fourth day, and removes them on the tenth.

The only peculiarity in Dr. Haywards operation is, that he introduces a whalebone bougie, and with this as a lever and the os pubis as a fulcrum he brings down the fistula so as to be more easily seen and operated upon. He allowed the sutures to come away by ulceration.

Dr. PANCOAST's operation differs from others in the manner in which he pares the edges, he slits the posterior and shapes the anterior in the form of a wedge, he thus approximates four raw surfaces by his plastic suture.

The different surgeons employ different methods of getting at the parts. Drs. Sims & Bozeman use the same position, which I will describe. The patient is placed upon a table, (covered with folded blankets, for the purpose of making it softer;) upon all fours with her arms folded and head lowered upon them. The table is drawn close to a window so that the rays of sun which come through can be reflected by means of a mirror into the vagina; as it is necessary to have all the "light on the subject" possible, so that every nook and corner of this "terra incognita" may be clearly exhibited to the searcher after openings. There should be three assistants, one to introduce and retain the speculum "in situ," one to attend the sponges and the other to separate the nates of the patient, so that the operator may have a clear field for action, as this is always desirable. A very bright day should be selected for the purpose. The patient should not be disturbed until everything is in readiness to proceed immediately, as the operation is a very fatiguing one. The day before operating the bowels should be thoroughly purged with castor oil, and then on the day of the operation locked up, (so as to prevent all straining of the parts,) by opium. I must here, although it is somewhat out of place, recommend the table proposed by Dr. P. M. Kollock, the talented professor of obstetrics in the Savannah Medical College, for a description of which I respectfully refer you to his article in the May and June numbers of the Augusta Medical Journal. It greatly adds to the comfort of the patient and convenience of the surgeon.

Dr. Sims claims that he has originated, 1st. A method by which the vagina can be thoroughly explored. 2nd. That he has introduced a new suture apparatus which lies imbedded in the tissues for an indefinite time without danger of cutting its way out as do silk ligatures. 3d. That he has invented a self-retaining catheter, which may be worn with great comfort to the patient during the whole course of treatment.

His method of operating is as follows: Having placed the patient upon the table, in the manner described, introduced the speculum and thrown light into the vagina, he raises the mucous membrane surrounding the fistula by the aid of a delicate tenaculum inserted into a handle some six inches in length, then with a small knife the same length he pares of this membrane around the orifice for a ¼ or ⅓ of an inch. After this he takes a spear-pointed needle, fixed in a long shaft, and armed with silk thread and introduces it at the distance of ½ an inch from the pared edges, the suture only penetrates the mucous membrane and does not enter the bladder and is brought out at the same distance from the upper or posterior lid of the fistula. The needle is withdrawn, and the proximal end of the silk is attached to the end of the silver-wire, then drawing upon the distal extremity of the thread he draws the wire into place, then taking two metallic rods suited in their length to the size of the fistula he runs the distal ends of the wire through holes made in the rod for that purpose and wraps the wires around the clamp to secure them, and lodges the clamp in its place at the upper end of the opening. Another clamp of the same description is now threaded with the proximal ends of the wire and pushed into position at the lower edge of the fistula by means of a species of fork, then making traction on the upper and at the same time pushing up the lower clamp, he approximates the edges. Perforated bird shot are then run on the wires, pushed up to the lower clamp and there compressed by forceps so as to secure them. The woman is placed in bed and a catheter introduced, attention should be paid to cleansing it when necessary.

Now the objections to Dr. Sims operation, are, 1st. Notwithstanding his assertion the sutures will cut out as is shown by the experience of Drs. Bozeman, Kollock, Mattaeur and others, they certainly do not do so as readily as silk sutures, but they do cut out. This may result in the formation of other fistules, and if this does not occur, the morbid action is liable to extend to the edges of the fistula and thus prevent the healing process. 2nd. Gangrene and sloughing of the parts may occur when the clamps are applied too tightly.—3rdly. It does not prevent, if there are two openings, the urine from acting on the edges, if by any accident one of the fistules should fail to heal.

Now Dr. Bozeman's operation obviates all these difficulties, and, besides this, has the advantage, that by it any number of fistules can be operated on at the same time, whereas it is often impossible to close more than one at a time by Dr. Sims' method from the unfavorable position of the openings.

I will now describe Dr. Bozeman's operation. The first steps are very nearly similar to Dr. Sims'. The wires being lodged in their places, the ends are run through a hole in a steel rod, flattened on one side and raised into a knob on the other, at its distal end and perforated for the purpose—called "the suture adjuster"—this instrument is then run down to the edges of the fistula at every point where the wires have been lodged. A button is then taken, which may be made out of lead or silver, the former answers every purpose when hammered out to the 1-16 of an inch in thickness—it may be made of any size or shape to suit the fistula. The under surface must be concave and the edges sligtly turned up to prevent irritation of the walls of the vagina by their sharpness. The double wires are then passed through holes in the button, and this is pushed down to the edges of the fistula. A perforated shot is then run on the wires down to the button and then held fast by compression. The wires are clipped about an $\frac{1}{8}$ of an inch above the shot and the severed ends turned over the shot. The patient is then placed in bed and Sims' catheter introduced.

Dr. Bozeman claims for his "button suture" the following advantages over the clamp suture of Dr. Sims': 1st. It is simpler in its construction and applicable to a greater number of cases. 2nd. It affords complete protection and perfect rest to the approximated edges. 3d. If there be two openings, one or both can be closed without reference to the condition of the parts. 4th. The introduction of the suture does not require the same exactness in regard to points. 5th. The independent action of each suture renders parallelism unnecessary, and thus gives the operator the privilege of introducing them in whatever direction best suits the purpose. 6th. The apparatus does not irritate, it matters not what the condition of the parts may be, so they are not in a state of ulceration or inflammation. 7th. The apparatus is required to remain seldom longer than ten days.

With due deference, I would say that any one who investigates the subject thoroughly, cannot fail to grant Dr. Bozeman all he asks. He has indeed achieved a triumph in modern surgery which the profession and the world in general should hail with gratitude.

# SELECTIONS.

## *St. Louis Medical Society.*

DR. MCGINTIE, President, in the Chair.

Reported by L. Ch. Boisliniere, M. D., Secretary.

*On Carbuncles. Case of Empyema. Distinctive signs between Empyema and Hepatic Abscess—Connection of Abscesses of the Liver and Chronic Dysentery. A case of Lacetation of Substance of the Brain. A case of a very large Thrombus of the Vagina. Vaginal Heronia. A discussion on Sun-Stroke—its Pathology and Treatment. A case of Abscess of the Liver operated on. Surgical cases. A case of Pseudo-Placenta Prævia. A case of Hydatitis or Mole Pregnancy. A case of retained Placenta, &c., &c.*

At this meeting of the Society Dr. LINTON introduced the subject of

### CARBUNCLES.

A subject of interest he remarked, especially as to its treatment. He had seen many cases of carbuncles, and he every day became more of opinion that the less surgical interference with this affection, the better. He could he thought attribute the fatal termination of one case to the use of the knife. He was aware that the best surgical authorities were in favor of deep incisions. Except, perhaps in a few rare cases, he thought that they could be dispensed with; he succeeded generally very well with poultices and leaving the carbuncle open itself; to this he added a sustaining treatment with quinine ammonia. He lately had a very bad case, which presented a very large carbuncle between the shoulders; this patient did very well with the above method. This case was also complicated with pellagra—a rare disease in this climate, he would remark.

Dr POPE said, that he was partial to the incision; it limits the ravages of large carbuncles; the small ones could do well without the knife. He had seen cases that died, he thought, from the want of the incision—small ones will generally progress favorably—large ones will, by a timely incision, be prevented from burrowing. He, also, believed in cauterization of the surfaces; the cauterization would produce a favorable alterative effect on the surfaces and their secretions. He remembered the case of a boy who presented in the back a very large carbuncle, at least fifteen inches in diameter, which quite exposed the dorsal muscles. The incision here prevented the further dissecting of the muscles—and the case did well.

Dr. McPheeters had lately under his care an old man with a large carbuncle. The patient applied to him when the carbuncle was already in the second or sloughing stage,—it was a very ugly looking ulcer with ragged edges and discharging unhealthy matter; the bottom of that sore was filled with soft and pultaceous exudations. A strong wash of nitrate of silver, together with a sustaining plan, was used in this instance, and proved very beneficial, for the patient, in spite of his old age—he was eighty—promptly recovered. Had he seen this patient in the early stage of the affection, he would have used the knife. The seriousness of this disease arose, he thought, mainly from the malignity of its character,—hence the satisfactory results obtained by a sustaining plan of treatment. However he was of the opinion, that, in some cases, the knife, followed by caustics and poultices, would limit the disease.

Dr. Smith said, that there was a distinction to be established between the inflammatory and the non-inflammatory carbuncle. In the former, a primary incision, by relieving the tension of the parts, would certainly tend to arrest the development of the affection and its future destruction of tissues, in the same way as an early incision in cases of paronychia, by removing the deep seated tension of the parts affected, proved very grateful to the patient. An early incision is imperatively demanded in those cases of inflammatory carbuncles where the pain is so great as to deprive the patient of sleep. The inflammatory carbuncles, he thought, were of a low type, and could, under certain circumstances, progress favorably without the incision, the sloughing in these cases was at times very extensive, and a sustaining course was the one to be adopted. However, in no circumstance, did he think could the incision aggravate the case.

Dr. McPheeters then related a case of

### HEPATIC ABCESS CO-EXISTING WITH CHRONIC DIARRHŒA.

It was the case of a man who died of a chronic diarrhœa at the Marine Hospital. His liver presented two large abscesses containing about a pint of pus. Dr. Brokaw, assistant physician to the same hospital, had investigated with care the condition of the liver of patients dying with chronic diarrhœa and dysentery, and the result of this examination was, that out of twenty-four patients who died of the above named diseases, seventy presented abscesses in the liver. This he would remark, was a strong confirmation of the views of Dr. Budd on the same subject.

Dr. McP. had also seen lately a case of

### EMPYEMA,

a case very interesting as being an illustration of one of the very rare terminations of this affection. The patient, an adult, had in the spring come to the hospital with simptoms of chronic pleurisy and effusion in the pleural sac. He was treated with mercurials, blisters and iodine, and discharged comparatively relieved. He resumed his occupations for a while, but a few weeks after applied again for admission. The former symptoms had reappeared, and in addition to these he had now a well-marked prominence over the region of the liver, and pain on the right hypochondriac region. A few days after he began daily to expectorate small quantities of pus and sanies. It was like the matter usually found in abscesses of the liver. Owing to the prominence over the liver, Dr. McPheeters thought that there existed here some enlargement of the right lobe of the lung, together with hepatic abscess communicating with that lobe. In a short time diarrhœa set in, and the patient died of hectics.

A post mortem examination was made, and in cutting through the diaphragm a very large quantity of pus made its escape—it amounted to perhaps half a gallon. Contrary to his expectation the liver was found intact: The diaphragm and the adjoining layer of the pleura had strongly adhered. These formed the inferior boundary of this purulent collection, which had by a sort of endosmosis permeated the tissue of the lung and found its way to the bronchii, through which portions of this pus was daily expectorated as above mentioned. Had not the dissection in this case been performed with a great deal of care, the adhesion between the diaphragm and the pleura, so strong and intimate were they, might have escaped attention, and the case been mistaken for one of abscess of the liver. Another source of fallacy would have been to attribute the purulent expectorations to an abscess of the lung, but this viscus not only did not present the vast excavations that the great amount of pus found would have necessarily formed, but manifested only slight signs of enlargement at its base. By eliminating this two-fold source of error, it became therefore certain, that in this case, it was question of one of those very rare occurrences where a collection of pus in the pleural sac will tend to empty itself through the substance of the lung and the bronchii. He would call the attention of the society to the peculiar mode of termination observed in this instance, as being certainly very rare, and as having been but seldom noticed before my writers on this subject.

Dr. HAMMER remarked, that this was a case of encysted empyema, and that the fact of their opening into the substance of the lungs was not so rare as thought to be. This mode of termination depended greatly upon the time this collection of pus had existed. If it had existed for a long time, by a sort of maceration that portion of the lung which had been immersed in the pus would undergo a sort of erosion, which would allow the matter to penetrate into its substance. This is not a rare termination of pleural empyema.

He would further say, that the differential diagnosis between empyema and abscess of the liver presented many points interesting to the pathologist. The obscurity of the diagnosis in these cases could however often be lessened by observing the sputa of the patient under the microscope; for, if the expectorated pus came from an hepatic abscess it would be found to contain liver-cells either in a perfect or rudamentary state In the same manner as the presence of these cells could have served to prove the fact of an abscess in the liver, their absence justifies one in excluding from one's diagnosis the supposition of that kind of abscess, and in establishing the existence of an encysten empyema. This difference in diagnosis would lead also to a difference of treatment. In this case the paracenthesis of the thorax would be advisable and would often prove successful. He regretted very much, on account of the rarity of this case, that an examination of the ejected pus could not have been procured; for it is a deplorable fact that medicines given internally are of little or no service in the treatment of empyema.

Dr. SMITH doubted very much the frequency of the above mentioned termination of empyemas. He had, however, often seen cases of hepatic abscesses finding their way through the diaphragm to the lungs and then rejected. He would infer from the presence of the pus in the sputa either a case of gangrene of the lungs or one of hepatic abscess. The natural termination most frequent in empyema, he thought, was by pointing towards the skin. That hepatic abscesses should more frequently empty themselves into the lungs was obvious from the nature of the patholofiical process going on during the progress of these abscesses. At first, the abscess is circumscribed, but as it proceeds the hepatic tissue becomes broken down by the state of subacute inflammation which has invaded the organ; gradually the pus works its way towards the convexity of the liver, and a vast quantity now exists pressing upwards on the diaphragm; by the effect of pressure continued for some time, as well as by a sort of maceration, the pleurodiaphragmatic septum the abdomen from the thorax at last gives way and an eruption of pus is made into the cavity of the chest, and the bronchii, through which it is finally expectorated. Every one acknowledged the great agency of pressure as hastening ulceration and causing absorption. He had referred to this pathological process, as it shows that if wrongly interrupted it may lead to the confounding of a suppurated hepatic abscess with empyema. He repeated that he thought the evacuation of an empyema through the lungs certainly a very rare and exceptional occurrence, and difficult to explain except under the supposition of the coincidence of a gangrene of the lung or an abscess of that organ.

Dr. **Hammer** answered, that this termination was rare, but because cases of empyema were fortunately for mankind very rare. He admitted the effects claimed by Dr. Smith for pressure in producing absorption, but was pressure absent in an empyema? Besides, he saw no reason *a priori* why the pus of empyema should not enter the substance of the lungs: this seemed to him the most natural method; for the pus of an hepatic abscess, before reaching the lungs, has to traverse eight times the thickness of tissue that the pus of an empyema has to perforate before reaching the same organs. The substance of the lung by macerating in the pus of the empyema must also become more friable, a part of the corroding action that non-laudable pus under certain circumstances will sometimes acquire. How does nature cure an empyema? by three methods, said he; 1st, by absorption; 2dly, by pointing; 3dly, by openings into the substance of the lungs—and the fact that empyemas do occasionally point externally, corroborates the assertion he had already advanced, that this process having to be performed through many tissues, before reaching the skin, *a fortiori*, could the pus permeate the lungs, which are defended against its invasion only by comparatively looser cellular tissue, etc.

Dr. **Smith** then related to the Society an interesting case of

### LACERATION OF THE BRAIN.

Was called a few nights ago to a man who, he was told, had fallen through the hatchway of a boat. This is all the history he could get of the case. When he saw the patient he found him in a state of profound coma, the pulse at 40, the pupils undilatable, in fact quite insensible to light. He was bleeding profusely from the left ear, and a slight wound could be noticed on the right brow. Dr. Smith, from the state of profound coma and the bleeding from the ear, diagnosticated this a case of fracture of the base of the cranium. He stated that in cases of this description the diagnosis was often very obscure and difficult to establish, especially when the circumstances preceding the injury were unknown. From the symptoms observed, it might also have been laceration of the substance of the brain (which it eventually proved to be). If the site of the injury received had been over the course of the internal meningeal artery, a rupture of that artery and subsequent extravasation of blood and symptoms of compression might legitimately have been suspected. A *post mortem* examination settled however these difficulties. There was found laceration of the substance of the brain, but no fracture of the cranium. From where did then the hemorrhage which escaped from the ears proceed? was it from the tympanum or the vessels of the brain? He thought that it was from the latter source.

Dr. **Hammer** remarked, that whenever blood was seen to issue from the ears we should suspect a fracture of the temporal bone. These fractures are often overlooked; they run in a horrizontal direction, and the dura matter is here so firmly adherent that it is often difficult to separate it from the bone. This fracture will therefore escape attention if not diligently sought for.

Dr. **McPheeters** recollected a case corroborating the last mentioned opinion; it was the case of a man who died after a fall from a horse; had not the spunge been freely used in washing the blood over the site of a fracture of the temporal bone, that fracture would have passed unnoticed.

Dr. **Pollak** presented to the Society a very interesting pathological specimen—it was a

### PLACENTA RETAINED TWO WEEKS IN UTERO.

A four months' fœtes had been expelled two weeks before this occurrence. The discharged placenta presented several notable anomalies.—It was below the normal size, and was characterized by a degree of carnification, which at first sight might have caused it to be mistaken for a mole or some other morbid uterine product. However, by a careful observation of the direction of the muscular fibres, the nature of the areolar tissue and the distribution of the rudiments of the vascular arrangement so characteristic of the after-birth, the true nature of the expelled body could be ascertained. A microscopic examination demonstrated besides, without doubt, the presence in this body of a number of placental cells. The history of this case was as follows: At 9 A. M., Dr. Pollak was summoned to the patient and found her literally weltering in her blood; the whole surface of the bed being covered with large coagula. She was, as might have been expected, in a state bordering on collapse. This flooding had begun the night previous at 10 o'clock, and without any premonitory symptoms. On examination, he ascertained that the vagina was clodded with blood. On attempting to remove the coagula, he experienced some difficulty in detaching one which seemed to be firmly imbedded in the canal of the ostincæ; this being effected at last, the hemorrhage ceased at once. The uterus was in a contracted state.—Brandy, Aromat. Spt. of Ammonia being freely administered, she gradually rallied. On inspecting the last removed coagulum, the placenta was discovered. Mrs. K., the patient, was then told by Dr. Pollak that she must have had a miscarriage, and that this was the most probable cause of her hemorrhage. She was also requested to tell what had become of the fœtus. She promptly replied, that she had miscarried just two weeks since of a four months' fœtus, and that this accident had been attended with no untoward circumstances. The midwife had assured her that "all was right;" she had been perfectly well since and out of bed the last ten days, attending to her domestic duties, and that she hardly had any lochial discharge. She then exhibited the fœtus, which she had preserved in a jar of alcohol.

Dr. **Pollak** gave also to the Society an account of a case of

### HYDATIDS.

This was a supposed case of placenta prævia. The patient in this case had gone nine months, enlarging all the time, and with all the ordinary signs of pregnancy, stoppage of catamenia, dark areola, morning sickness, etc., so that herself and friends thought this a *bona fide* case of pregnacy. When called to her, Dr. Pollak said she had severe uterine pains and flooded profusely. He could not however ascertain whether there had been any premonitory flooding at the seventh or eighth month. He examined per vaginum and felt a soft and elastic body protruding through the os uteri. He thought it was a case of placenta prævia, when with a severe uterine pain the patient suddenly passed a very large mass of hydatids, after which the flooding subsided. The quantity of these acephalocysts was so large as to fill two night-vessels. Dr. Pollak remarked, the diagnosis of this case had been surrounded with a great deal of obscurity; it did not, as usual, present a rapid enlargement of the uterus and a discharge of blood and serum. He was aware that these symptoms were frequently present in cases of mole or hydatid pregnancies, but they had been wanting in this instance.

Dr. **Boisliniere** reported to the Society a case of

### THROMBUS OF THE VAGINA.

The patient a primipara, of luco-phlegmatic habits, with a normal pelvis, after an ordinary labor, ending with rather severe expulsive pains in the birth of a living child, was left comfortable, when, an hour and a half after, he was called to see her in haste. He found her in the greatest suffering, crying loudly and assuring those around her that this was ten times more severe than her labor pains. She complained then of a burning sensation in the vulva and a severe bearing down on the rectum, which gave her a pressing inclination to go to stool. She suggested that it was piles. This pain was so agonizing that she had no words to express it. In fact, she could hardly utter two words in succession. This appeared to him the more strange from the great fortitude she had shown during her labor. Dr. Boisliniere confessed that he fell here into the same error committed by Dr. McBride in a similar case, and that he took this at first to be one of those violent tenesmic pains that are experienced sometimes after labor, when the child's head has quickly and violently swept over the vaginorectal septum—a sort of severe spasm—and he ordered opium suppositories, and hot fomentations to the parts; the latter, as proved on trial, only aggravated the evil; the pain continuing to increase instead of abating. He made then a vaginal examination, which revealed to him the true nature of the complaint—it was a very large thrombus, beginning on the left side, ascending along side the pelvis as high up as the finger could reach, filling the whole of the vagina, so that the finger could with difficult only be introduced, and descending as low down as the left labium, where it was characterized by great hardness and elasticity. This tumor was rapidly enlarging—he could ascertain this by keeping the end of his finger on its surface—the patient was in the greatest agony, her pulse was getting quick, her countenance anxious and distressed. There was only one course to follow—Dr. Boisliniere, under these circumstances, availing himself of the great experience of Dr. M. M. Pallen in matters of this sort, sent for him, and it was decided to open the tumor largely at once. Dr. Pallen then incised the tumor which was projecting and bluish—his incision extended to three inches in length and reached the cavity of this thrombus, after which he emptied it of the coagula it contained, except the most adherent at the bottom for fear of inducing hemorrhage, and a sponge was introduced in the vagina to act as a tampon. The patient was immediately relieved and recovered well. The amount of clotted blood extracted must have been several ounces.

Dr. PALLEN said, that the case related by Dr. Boislinere was a very interesting one; interesting on account of its rareness, and on account of the fatality often attending them. He believed that the first published case in British midwifery, was that of Dr. McBride, which occurred in 1776. It had however been observed before. Since then, it has been noticed and described by various writers. Dr. Denman saw three cases, and all recovering, he was induced to think that the disease was devoid of danger; subsequent experience has, however, shown that he was mistaken—death has frequently occurred.

This disease, which consists of an effusion of blood into the areolar tissue, may be in one or both labia, may extend into the pelvis, and into the perineum. It doubtless, sometimes, occurs in the unimpregnated female; but it is usually an accompaniment of labor, appearing either during its progress, or soon after. The swelling of the labia, and the feeling of weight are succeeded by great pain. If the distension be very great, the pain is agonizing—fever of an active kind ensues, and even delirium. The patient can only lie on her back, with her thighs widely separated. The tumor is of a lived color, almost black, and is extremely tender.

Dr. Pallen added, that there could be no doubt that the effusion arose from rupture of some vessel. In a state of pregnancy, the vessels are in a varicose condition, and their rupture easily produces a large discharge of blood. What particular blood-vessel is ruptured, is not determined, probably the pudic vein.

If the tumor, said Dr. P., occurs before delivery, and increases slowly, and does not interfere with delivery, it might be trusted to nature. If it increase rapidly and interfere with labor, it ought to be laid open, and the coagula turned out. The same rules apply to the treatment, if it occur after delivery. If it be of slow formation, and not large, the application of cold cloths is all that is necessary; but if it form rapidly, and the pain is great, then we ought to cut it open, turn out the coagula, leaving those which are entangled in the areolar tissue, as they will tend to prevent further bleeding. This being done, the tampon should be used, to produce pressure on the blood-vessels.

Dr. Boisliniere said, that a remarkable circumstance attending this case was the rapid formation of the thrombus one hour and a half after the birth of the child. This, said he, could only be explained on the supposition that this bloody tumor had begun to form before delivery, and that the head of the child had acted as a tampon, favoring the formation of coagula over the mouths of the bleeding vessels, thus arresting the hemorrhage for a time, and that these coagula having given way only an hour and a half after the expulsion of the child, then the hemorrhage began again to fill the tumor. He would also add, that the view of Dr. Pallen, that these hemorrhages depended upon a varicose condition of the veins of the pelvis, is confirmed by the fact established by statistics, that thrombus may occur indifferently after severe and protracted labors, or instrumental labors, as well as after easy and short labors, and that the occurrence of these tumors arose mostly from the general varicose diathesis which characterizes the state of utero-gestation especially with certain women of lymphatic temperament. Hence that fact that as this state of varcosity is more frequent with women who had several children, so should cases of thrombus be mostly found among these.

Dr. PALLEN remarked also, that a careless observation might cause a thrombus to be mistaken for a vaginal hernia, but surgeons had established rules sufficiently explicit to guard against this error.

Dr. GREGORY said, that the diagnosis of tumors about the vagina was sometimes surrounded with some difficulties; he had himself seen a case diversely diagnosticated as a vaginal hernia and an encysted tumor, which proved to be the former. These thrombi might at first sight be confounded with the different tumors which make their appearance in the vagina, whether their point of departure be from the cellular investments of the interior of this canal, or from some morbid enlargement of the ovaries or even a vesical calculus. Vaginal rectoceles or cystoceles might also be mistaken for a thrombus. However, the history of the case will be here of the greatest assistance to enlighten the diagnosis. Moreover, the form, the consistency, the situation of this tumor, its sensibility to pressure, the suddenness and rapidity of its formation, must be taken into consideration as well as its color when this can be appreciated. To distinguish this from a vesical calculus or a vaginal cystocele, it must be remembered that a thrombus has very seldom its seat at the anterior portion of the vagina. The facility of penetrating with the finger into the sac of a vaginal rectocele, will easily enable one to eliminate this from the diagnosis.

Dr PALLEN related a case of pleurisy, terminating in serious and purulent effusion, and asked the opinion of the members present as to the

### ABSORBABILITY OF PUS.

Dr. GREGORY, in reply to this question, said, that he would remark, that all pathologists agreed that pus was absorbable; but that when it existed in considerable quantity the surgical rule was now, as it has always been, to evacuate, provided it can be reached without too much danger to the involved parts. The absorption of pus from the eye has been observed frequently, and doubtless deep collections beyond our observation are occasionally thus disposed of. The case of empyema, cited by Dr. Pallen, may have been originally hydrothorax, the lymph corpuscles diffused in the serum occupying the pleural sac degenerating into pus at a subsequent period. Vogel mentions a remarkable case in point.—He said, added Dr. G., that the fluid discharged by the two first operations of paracentesis performed on a patient, contained fibrin in solution, and in a short time coagulated. On the third occasion, it no longer contained fibrin, but, on the other hand, pus corpuscles. A few days after the last operation the patient died. On dissection it was found that the pleural cavity was completely invested with a thick pseudo-membrane, which was already half organized, and must therefore at all events have existed several days previous to death. The pus could therefore only be formed in the fluid; but since the fluid which was first discharged contained fibrin, it is clear that this constituent was not originally absent, but was doubtless consumed in the formation of pus. Nay, more, said Dr. Gregory, the incipient formation of pus has been observed in plasma entirely separated from the body. For instance, Dr. Helbert took plasma from beneath the cuticle raised by an ordinary blistering plaster; it exhibited no corpuscles of any kind; after standing for six hours, minute corpuscles were formed exactly analogous to those which appear in wounds when the formation of pus commences. Repeated experiments invariably gave the same results.

The absorption of pus, he believed, was generally a slow process; the corpuscles may remain a considerable time unchanged after the removal of the "liquor puris." In the course of time the pus cells wither, undergo the fatty or calcareous degeneration, or ultimately crumble into minute particles, liquify and re-enter the vascular current. The uncertainty of absorption in hydrothorax, the danger of purulent degeneration, after which resorption is much more doubtful and tardy, indicate the propriety of early paracentesis as practised for many years in this country by Dr. Bowditch, of Boston.

Dr. Pope remarked, that whereas the absorption of pus was rare occurrence in those cases, he had adopted the rule of performing early paracentesis. Three-fourths of the cases he had operated on had recovered.

Dr. Hammer could not let this opinion pass uncontroverted. For him, the absorption of pus was the rule. He had certainly seen it absorbed in cases of hypopyum.

Dr. Pope answered, that in the majority of these cases it was not pus but lymph that was present.

Dr. Hammer said, he had no doubt that in hypopion pus was present. A hypoyum, said he, was nothing but an accumulation of pus from the opening of an abscess of the cornea into the anterior chamber of the eye.

He had seen several cases in which this pus had evidently been absorbed.

Dr. HAMMER said, that he had lately operated on a man for

### STONE IN THE BLADDER.

The patient aged about thirty, of apparently good constitution, inclined to corpulency, presented however some indications of a strumous habit. For two years this man had presented all the rational signs of a calculus. Two physicians who examined him did not recognize its presence. The patient was in low spirits, suffering great pains, constant desire to urinate, which he could satisfy only by a frequent use of the catheter—at times he passed bloody and purulent urine. Being examined, the stone was soon recognized, it was lying on the neck of the bladder, and this was found much contracted. The presence of several calculi was besides revealed. After inhaling chloroform, the patient was operated on by the lateral incision; a large stone of the size of a hen's egg and three smaller ones about the size of pigeon eggs were removed. The largest one being of a friable nature was previously crushed before being removed. Dr. H. said, that in this case he would have preferred the lithontriptic method, the patient's perineum being very much contracted and narrowed by an abnormal approximation of the tuberosities of the ischium, and also because there existed masses of fatty and cellulor tissue thickening this region in an uncommon manner. He preferred however the knife on account of the great irritability of the bladder, pus and blood having been passed, and also on account of the unusual contraction of that viscus.—The stones were found to be of the triple-phosphate variety, and the patient was, said he, thus far doing well.

Dr. LONERGAN reported a case of rare occurrence, viz:

### A SECOND ATTACK OF CONFLUENT VARIOLA IN THE SAME SUBJECT.

The subject of this observation, a boy six years old, had been attended three years ago by the lamented Dr. Reyburn, during an attack of small-pox of a confluent character. The patient had not been vaccinated before. He fully recovered from this disease and enjoyed excellent health for three years, when he was again exposed to the contagion of small-pox which prevailed extensively in the neighborhood where he lived. In the beginning of this second attack the symptoms did not depart from those which are usually found. The eruption, however, gradually became general and confluent. In the course of a week typhoid symptoms made their appearance, the tongue became dry, low delirium set in, and the vesicles ceased to fill up, thirty-six hours before death, which occurred on the 10th day of the invasion. Dr. Lonergan remarked, that he had reported this case on account of the very unusual fact of *confluent* small-pox occuring twice in the same individual. He was aware that relapses of ordinary small-pox had been occasionally observed, although this had been strongly denied by very high authorities; but relapses from confluent variola were certainly very rare. A second attack of small-pox has occasionally been found much more severe and oftener fatal than the first; and patients who had hardly been marked by a first, said he, sometimes completely disfigured by a second attack. But these were exceptional facts, and generally, when a person has had small-pox once, the second attack will be much milder in its form, and present the characters of varioloid or even of varicella only.

In the management of those cases which assume a typhoid character from the onset, he found that the most appropriate plan of treatment was to sustain the patient with nourishing broths, occasionally with stimulants, and hardly giving any medicine except opiates at night; the latter remedy he found invaluable in controlling the delirium vigilans so frequent in this affection. He had during the winter and spring several cases, in which he had a fair opportunity of appreciating the value of this mode of treatment.

Dr. Pope gave the following interesting account of

### A RARE CASE OF WOUND OF THE PALATE.

A child about four years old fell down stairs, having at the time a flageolet in her mouth. The sharp end of the instrument was driven against the palate, completely detaching it in a semicircular manner from the bones. The loose flap, attached only at the extremities, hung low down in the pharynx and was very much contused; a vertical laceration also existed but did not extend to the free margin of the palate; the voice was affected as in cases of lost palate. With much difficulty, by means of a porte-aiguille and curved needle, three sutures, one median and two lateral, were well placed, and the flap was thus held in situ. Silence and the use of liquids were enjoyed. On the second day, a well-marked eruption of scarlet fever took place, but very fortunately the throat entirely escaped. The wound meanwhile looked well until the fourth day, when, in consequence of a small slough, there was failure of union at the middle and left sutures. About one-third of the laceration was, however, firmly united, and this served to keep the flap sufficiently in place for granulation to go on and gradually close up the remaining space. This accident happened about three weeks ago, and now the whole wound is cicatrized without any abnormal opening, the line of cicatrix being very distinct, with slight irregularity in the middle at the junction of the soft to the hard palate. The voice is but little altered, and upon the subsidence of the stiffness of the palate, will, most likely, regain its usual tone.

This case is interesting from the admitted difficulty of performing the operation for velosynthesis in so young a subject.

## *Mechanism of Nervous Action.* By J. ADAMS ALLEN, A. M., M. D., Formerly Pofessor of Therap., Mat. Med. and Juris. in the Indiana Medical College; and late Professor of Physiology and Pathology, and acting Prof. of Mat. Med. in the University of Michigan.

The readers of the London Lancet will recollect that W. Tyler Smith, in the year 1848, pointed out the remarkable synergic relations of the three great organs of the sexual system,—uterus, mammæ and ovaria. Had he not been blinded by the term "excito-motory," it seems impossible to believe but that he would then have discovered the real mechanism of the "synergies." (Vide Lord. Lan., Oct. 1848, p. 327.)

One point only I here notice:—Tyler Smith urges in that series of lectures, that the motions attributed to the *fœtus in utero*, were, in fact, caused by motion of the uterus itself. There is no nervous connection between the mother and child--hence he argued the excito-motor influence, well known to give rise to these movements, must act upon the muscular tissues of the uterus. But careful investigation convinced me that the fœtus was itself the moving object.

The corollary is clear—the nervous are induced a change in the blood which supplied the placenta, and this modified blood caused muscular contraction in the fœtus. The *modus*, the same as though moving the muscles of the mother.

Why does parturition occur at a fixed period?

Because the changes in the blood of the mother occasioned by the full developement of the fœtus produce that particular molecular change in the uterine muscle which necessitates contraction. The molecular change is the cause.

The same blood-modification may occur from accidental causes, or through the medium of the nervous arc.

Why does application of the child to the breast provoke the mammary secretion? Is it necessary to introduce the motor before the secretory effect? Is it philosophical? Not at all.

Constant molecular changes, the necessary condition of life, keep up what is called "passive contraction," or the *tone* of muscles, but the exigencies of animal life require something more beyond this; something which will *intensify* these changes to suit the wants of the animal. The nervous system meets this demand, but not by the introduction of new modes of operation in the moving tissues. The molecular changes are varied by the influence of the nervous system.

The various functions of vegetable life are carried on under nearly identical conditions: the organs, therefore, have no need of internuncii. But when animal life comes in to vary the conditions, then internuncii become necessary. But nature chooses uniformity, and thus no new machinery or unparalleled aparatus is made use of. Synergic organs reciprocally respond to the simple nervous arc.

Much confusion has arisen among physiologists by vague attempts to localize a particular nervous centre. The true centre is the nerve-vesicle, and may radiate its influence to yet another point, which again becomes a centre. The nerve fibre creates nothing. Collectively the fibres serve the purpose of bringing all the vesicles together, and yet keeping them apart.

It is proved that nervous impulses will pass by vesicles in contact as well as by nerves of commissure. The white fibre insulates and localizes the effect—the gray more nearly analogous to the vesicle, diffuses it almost indefinitely. This is shown by their several connections and by observation.

The points of contact of the so-called "sympathetic," and the cerebro-spinal systems are limited, yet they do exist; and gray and white fibres may intermingle, as we see fibrillæ of striated and non-striated muscular tissue side by side.

The ganglionic chain is little connected with the cerebro-spinal axis, simply because it is unnecessary, and nature never does a needless work. But this shows no real diversity of operation. As well might we exclaim against the optic nerve and vesicles because they are not intimately connected with a lumbar spinal nerve and its fused ganglion.

The outward expansion of the nerves of special sense, it is now believed, consists of vesicular neurine. It is quite probable that this is the general fact for all recipient nerves. The pecular structure of this vesicular expansion fits it for undergoing changes on the application of its particular stimulous, and that only. Transmitted inward by the conducting tissue, it developes there another change, which may be reflected to several different points, according to the connections of the central vesicles--the central vesicles, in the latter instance, having the same relation to the second vesicular centre reached, that the outward vesicular expansion had to the first centre.

To take the optic nerve, for example, and trace the series of operations which may result from its action:

1 Retinal change; 2. central vesicular change at the "origin" of the optic nerve; 3. a "Reflex" upon the iris; b. upon the lachrymal gland; c. upon the blood vessels of the eye; d. Through the gray vesicles of the central nervous ganglia (fused) of the base of the brain, and by commissural fibres to gray matter of the convolutions, etc, of the cerebrum; e. ditto. to the cerebellar vesicles; f. through various nerves, vesicles and ganglia to muscular organs; g. to secreting organs.*

From careful study upon this topic, I am inclined to the belief that the gray vesicles upon the convulsions and anfractuosities of the brain have a similar relation to the commissural fibres and central nervous vesicles (constituting the true centres of volition, sensation, etc.) that the expansions upon the optic, and other nerves of special sense, do to their commissural fibres and the same centre.

The retinal cells respond only to their own stimulous; and their lesion, or that of their fibres, or central vesicles, gives rise to the subjective phenomena of vision.

In like manner the superficial cerebral vesicles respond only to their peculiar stimulous, and lesion of them or their commissural fibres of connection, etc., gives rise to the subjective phenomena of mind.

If there is anything of mind beyond the registered impressions of sense, it finds the organs of communication with the body through these vesicles, as light comes in by the retina, and sounds by the cells of the distal auditory expansion!

The force of mind once producing the vesicular change, the mechanism of its action thereafter is altogether analogous to that of physical stimuli!

In all are the commencing vesicle, the conducting fibre, and the recipient vesicle, which latter becomes the commencing vesicle of a new chain!

A correct idea of the *reflex phenomena* of mental nervous action, will explain, at once, about all of the real phenomena of "spiritualism," table-tipping, mesmerism, somnambulism, dreaming, etc.

Abstract metaphysics applied to psychology causes the whole thing to evaporate in subtleties; direct physiological investigation brings the whole subject to the simplest possible concrete.

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* It will be noticed that in deference to common usage, I employ different terms for muscular and secreting organs, but it should be recollected that physiologically and histologically, they are homologous.

I have said elsewhere that the "new principle," or "doctrine," is but a corollary from what was previously known. This is true of all discoveries by the inductive method.

It was a known fact that diseases or disturbances of the nervous centres, deranged both motion and secretion in the parts supplied from those centres.

The term functional disease was either meaningless, or it involved in many instances reflex phenomena.

The terms *centric* and *ex-centric* causes of internal disorder could find no other explanation.

The entire doctrine of "revulsion" was vague and indefinite without this transparent statement.

The structure of muscular tissue, its cell formation and relation to nervous tissue demanded this view.

The doctrine of "sympathies" was otherwise incapable. The discoveries in cytogenesis and histology, showing the analogy of development, nutrition, and decay of muscular and glandular organs pointed definitely to this idea.

Even though the opinion of M. Hall that muscular irritability is dependent upon the cerebro-spinal system be still entertained, there is no escape from the conclusion that the blood and fluids must be the medium of action.

In October, 1849, in the case of a gentleman on trial for homicide of his son, I gave evidence upon the question of insanity, and argued the presence of diabetes as indicative of disease of the nervous centre. The other indications, and the event, confirmed the diagnosis. (Vide Bost. Med. and Surg. Jour., Vol. 42, p 441.) Few writers, indeed, have been found hardy enough to deny the influence of disease of the nervous centres upon secretion. The corollary is obvious, that nerves which induce changes in these nervous centres will, secondarily, induce changes in parts receiving nervous supply from those centres.

Irritate the ulnar nerve at the elbow, and sensation is referred to the ring and little finger;—continue the irritation and actual inflammation will ensue in the parts experiencing sensation. Where is the line of demarkation between the sensory and secretory here? There is precisely the same effect in case of reflected sensation elsewhere.

Probably the largest number of cases of neuralgia are examples of what might be called excito-sensitory action.

Is there philosophical propriety in inventing the term?

The central truth is that the nerve vesicle undergoing change, induces changes in structures with which it is in connection, by conducting nerve fibres, or vesicles—the expression or form of that change depends on the structure reached.

The nerve vesicle may be primarily undergoing change, or by the medium of an incident fibre.

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*Letter from W. R. Marsh, A. M., M. D.*, Professor of Chemistry Materia Medeica, and Toxicology, Medical Department of Iowa University.

KEOKUK, Iowa, August 13, 1857.

MY DEAR DOCTOR:—

Sickness at home, and the urgent pressure of other business must be my apology for delay in replying to you.

To your interrogations I reply but briefly because opportunity is wanting for speaking more at length now, although should you wish it, I will write more fully at another time.

*First.* The manuscript lectures to which you refer, and from which the transcript mentioned is taken, were written by you during the summer of 1848, and publicly delivered before the class of the Indiana Medical College during the session of 1848-9.

I am possitive as to the date of the writing and delivery, and the identity of the manuscript, because I was then reading medicine under your instruction; and, as we were not merely teacher and pupil, but intimate friends, it was permitted me to peruse your lectures from day to day as you progressed with their preparation. During the session of 1848-9 I occupied the same private room with yourself, and it was my custom each evening to look over the lecture you had given during the day, for the purpose of fixing the subject more fully in the memory, and also of correcting, if need be, my notes of the same. Hence I could not but remember, and if I failed to do so, the notes thus taken would be sufficient to revive remembrance.

*Second.* As to what you taught, I reply: That in addition to what you had written in explanation of your views of the *modus operandi* of escharotics and revulsives generally, you were wont to enlarge extemporaneously, appealing to analogy and known facts to sustain your position.

I may sum up your remarks, in brief, as follows:

*Secretion by glandular or secernent organs* is, in relation to the reflex nervous system the analogue of *motion* in muscular tissue. Both are operations of double nervous arcs. Impressions upon efferent nerves, conveyed to nerve centres, produce changes therein, thence the influence is conveyed through efferent fibres to the organ or organs in direct nervous connection (through the double arc) with the part where the first impression is made, and at the distal extremities of these efferent nerves, molecular changes are produced. These changes result in the production of motion, sensation, or secretion, just as the organ has for its proper function the one or the other. "Contiguous sympathy" may be thus explained, as also the "sympathies" of organs topographically or anatomically remote. And I remember you adduced as an argument in support of these views, the self-same instances advanced by Dr. Campbell—the "*sympathies*" displayed in dentition; as also the influence of impressions made upon other parts, as the feet, mammæ, etc., upon the menstrual secretion Here, both the motor and secretory influence were apparent accordingly as the character of the uterus assumed more or less of the office of a muscle or of a secretory organ.

The above illustrations, made by you, of your views, I give; and although imperfectly as representing the manner of your treating the subject, yet I hope they will be sufficient for your present purpose. The utmost brevity is all my time will now permit.

*Third.* You taught the same in the winter of 1849–50, but more fully than in the preceding course As to your after teachings, I know nothing positively except as follows:

In the summer of 1851 or '52 you made me a visit, and while sitting in my office with me, the conversation fell upon the comparative pressure in lecturing upon Mat. Med or Physiology. I asked you how it fared with your two *enthusiasms*, viz: your views of the office of the reflex system of the nerves, and the catalytic action of medicines, when you replied that you had a better opportunity in lecturing upon both branches to develop the former fully to the minds of the class, for that when upon the "excito-motor" nerves, it was easy to show how motion and secretion were analogous results of the same causes. You expressed yourself as more than ever confident of the justice of your views, and expressed some astonishment that writers upon therapeutics should have failed to notice a matter so important in a pathological sense, and as an index of therapeutic applications.

Finally, your teachings have so far influenced *my mind*, at least, as to induce me to teach the same to our classes here in my lectures upon therapeutics. To the fact that I was under your instruction from the first of my medical study, may doubtless be attributed my not noticing the fact that it was something new in physiology, although I was aware that the application of the idea, as made by you, was new, and I have so remarked in my teachings, giving you the credit.

Hoping that you may be able to prove to the satisfaction of the profession, what I have no doubt you are entitled to, the credit of being the first to arrive at and promulgate "*the idea*" although not the "designation" of the "excito-secretory" system of nerves; and that you may be ever successful in your efforts for the good of medical science, I am,

Sincerely yours, WELLS R. MARSH.

Professor J. ADAMS ALLEN, M. D., Kalamazoo, Mich.

(*To be Continued.*)

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From the Medical Chronicle of Montreal.

## *Professional Secrecy.*

The relations of a physician to those who favor him with their confidence are of so intimate a nature; he has so many opportunities to become acquainted with matters, occurring in families, that ought to be held sacred by him and remain securely locked in the deepest recesses of his bosom; he is so often selected as the confidant to whom the wretched, sorrowful, and repentant intrust their tale of guilt, remorse, and grief, it becomes him to be a man of extended sympathies and high uncompromisable honor to command the esteem of his patients, and make them feel that their simplest as well as greatest secrets are perfectly safe in his keeping. From the earliest periods in the history of medicine down to recent times, the fathers in medicine, and those intrusted with the preparation of the medical neophyte for the practice of the important duties of his professsion, have thought it incumbent on them to exact an oath from each successful candidate, that he would never betray any secret intrusted to his keeping, or one that he should accidently become cognizant of, professionally, ere they invested him with the authority to go forth into the world and assume the responsibilities of physician to his fellows. It was never intended, however, that a medical man was to remain silent whenever facts relating to fearful crime, such as murder, either accomplished or contemplated, came to his knowledge. No oath could be binding on a man, or warrant him in assisting to defeat the ends of justice. Under such circumstances silence would be criminal, and make him accessary to the fact. Instead of meriting praise for keeping secrets of that nature, he would rather deserve the execrations of society.

An event has lately occurred in the city of New York which has caused a great deal of excitement in the community, and involves the question of the betrayal of trust on the part of a physician. We propose laying, in brief terms, the facts of the case before our readers, with our views on the subject. The notorious Mrs. Cunningham, *alias* Mrs. Burdell, who a short time since was tried for the murder of Dr. Harvey Burdell, and acquitted, has lately attempted the perpetration of a criminal fraud, formed for the purpose of obtaining the whole of the late Dr. Burdell's property. It appears that while this lady was confined in the Tombs awaiting her trial for murder, she caused it to be announced that she was pregnant with child, and that in due time an heir would be born to Dr. Burdell's estate. Her personal appearance justified the assertion, and, at her request, Judge Dean gave an official notification of the circumstance. Mrs. C. next consulted Dr. Uhl, who would appear to have been her medical adviser, and desired to engage his services. Subsequently she told him that her pregnancy was a pretence, but that if he would aid her in carrying out her plans to a successful issue, one thousand dollars would be his fee. The services of one Dr. Batlin, an individual whom Mrs. Cunningham professes "to have in her power," were also secured for the interesting occasion. Dr. Uhl apparently assented, but his conscience not feeling very easy, he immediately informed District Attorney Hall of everything that had transpired. By the advice and at the urgent request of Mr. Hall, Dr. Uhl entered enthusiastically into Mrs. C.'s plans, with the view of exposing the attempted fraud and bringing the guilty ones to justice. "To carry on the project, he represented that he had the good luck to have found a woman who was about being confined in Elm Street, who would part with her baby. She was neither to see or know Mrs. Cunningham, and therefore there could be no possibility of any unpleasant developements. Apartments were procured at 190 Elm Street, and were furnished by Mr. Hall for the proper reception of a laying-in woman. Meantime officers Dilks, Hopkins, Speight, and Walsh were detached to keep a close look-out in Bond Street, Mr. Hall assisted himself on Monday in perfecting arrangements. An infant that had been born on Saturday was engaged from its mother at Bellevue Hospital, marked by lunar caustic, and otherwise identified, and a nurse engaged. Dr. Uhl was to be at Elm Street to deliver over the baby to the Sister of Charity who was to call for it.

All things being ready, Mrs. Cunningham was notified that the heir was born, and she said she would send a lady (whose name she refused to give) to look at the place, so as to know where to go at a later hour. Dr Uhl stationed himself at 190 Elm Street, and kept watch for the lady who was to be sent to reconnoitre the premises; and in a short time a person made her appearance, passed by and inspected the place. That lady, although in the disguise of Charity, Dr. Uhl recognized as Mrs. Cunningham herself. As soon as she had left the neighborhood, Dr. Uhl again visited No. 31 Bond Street, when Mrs. Cunningham called a lady, whom Dr. Uhl recognized as her sister, (Mrs. Burns,) into the room, and asked her if she was ready to go for the child, when Mrs. Burns asked for the dark dress, and Mrs. Cunningham told her where it was. It was then arranged by Mrs. C. and the Doctor that he should go to No. 190 Elm Street, and wait at the front hall till the lady to be sent should come; and in order to avoid any mistake in the matter, the lady was to carry a white handkerchief in her hand. After waiting about fifteen minutes, the lady appeared who had previously reconnoitred the premises, carrying, as agreed upon, a white handkerchief in her hand. The lady wore a long black dress, and a hood or close bonnet, after the style worn by the Sisters of Charity—her face being almost covered; but from her manner, form, and general bearing, Dr. Uhl again recognized her to be none other than Mrs. Cunningham herself. Dr. Uhl asked her if she had come for the child. She made no reply, but followed him up stairs to the door of the room. The light burnt dimly on the centre table, the door which opened into the adjoining room displayed the foot of a cot on which the sick mother was supposed to be prostrate. Mrs. Cunningham only looked in, but a glance must have satisfied her all was right; the nurse, Mary Regan, sat with the child in her lap, the basket at her feet; as Mrs. Cunningham presented herself, she was asked if she came for the child; as agreed upon, she shook her handkerchief in reply; the next instant the "little thing" was placed in the basket and handed through the partially opened door, and Mrs. C. hurriedly left the house. Dr. Uhl then started for home leaving those engaged with him in the plot to attend to Mrs. Cunningham's movements. The doctor had been at home but a brief period, when he received a summons through a gentleman (a stranger) to repair immediately to 31 Bond Street, as Mrs. Burdell was then suffering with labor pains. On arriving at the residence of Mrs. Cunningham, he was conducted to a darkened room, where Mrs. Cunningham was in bed and apparently in great suffering. Dr. Catlin and Mrs. Burns, sister to Mrs. Cunningham, were present. Dr. Catlin brought in a pail containing blood, with which the sheets were saturated; and, in due time, after considerable groaning and moaning, the expectant heir was brought forth and transferred over to the nurse, Jane Bell, who washed and dressed it, while the doctors went through the process of bandaging the suffering, bu' delighted mother, who took occasion to exclaim, with much earnestness, that "she had put her trust in God, and in return he had been pleased to favor her!" At this stage, Dr. Uhl left the house and the case to the charge of others, who were on hand at the door. All this farce was performed on Monday night, between eleven and twelve o'clock. At half past eight the policemen in the secret took their stations, Capt. Dilks in Broadway opposite Bond Street, Capt. Speight opposite Burdell's house. Capt. Hopkins took up his station in the alley which leads from the rear of 31 Bond into Bleeker Street, when he was mistaken for a burglar, much to the alarm of the neighborhood. Capt. Speight saw Mrs. Cunningham come out of the house, followed her to Elm Street, and saw her return to Bond Street, the basket containing the baby in her possession. The policemen then took their stations in front of the house to observe who went in or out. Among the latter was Catharine Bell, the nurse, Dr. Catlin, and lastly Dr. Uhl. About twelve o'clock at night the police started towards Broadway, when they met District Attorney Hall, Capt. Dilks, Dr. Montagnie, and officers Smith, Wilson, and Walsh.

After a little conversation, it was agreed that Capt. Dilks and Dr. Montagnie should go to 31 Bond Street, and state that they had heard that a curious delivery had taken place, and that they wanted to see that all was right. Two women answered the summons, and stated that Mrs. Cunningham was too sick to be seen. The women then went up stairs, and the men followed. Before reaching what was Dr. Burdell's bedroom, the women opened the door and said, "Mrs. Burdell, here are two gentlemen who want to see you." She said, "Shut the door; they can't come in." Dilks immediately went in and said, "Madam, we don't wish to interrupt you seriously, but we have heard that you have been delivered under suspicious circumstances, and it is our duty to inquire." The light was then down; they turned it up, and saw by her side a sleeping infant. Dr. Montagnie recognized it as the child he had carried to Elm Street. He had previously marked it with a little lunar caustic under each armpit and under each ear, marks which did not appear until next day. He had also cut the umbilical cord anew, and retied it with the edging of a pocket-handkerchief which there could be no mistaking.

Dr. Montagnie said to Mrs. Cunningham, "Whose child is this?" She said, "It is my child." He asked if it was the child of Dr. Burdell.

She said, "Yes, of course! whose else could it be? I am his widow."

Almost immediately Dilks came down to the door, and the police went up stairs. Those present were apprehensive that the child might be killed, and an attempt was made to take it away from her at all hazards. She said, "Don't take my baby!" and the woman persisted in saying, "You must not take this baby; it is Mrs. Burdell's baby." One of the police asked, "Where is the basket that it was brought here in?" She said, "There is no basket in the place. A policeman then said, "There was no use making any disturbance about it; the doctors were arrested, and everything was found out; the child belonged to the Bellevue Hospital. The hospital clothes had been taken from it, and new and elegant apparel, evidently made for the purpose, had been put upon it. In the back room—the room in which Dr. Burdell was murdered—the police found the remains of a lunch. Meanwhile Mrs. Cunningham still persisted that she had been in labor, and was suffering with afterpains. The basket could not be found, high or low. The after-birth that Dr. Montagnie brought from the Bellevue Hospital was there; a pail of bullock's blood was found, and the sheets smeared with blood."

Now, the question which has been mooted in the United States, in reference to the conduct of Dr. Uhl, viz: Was he warranted in betraying secrets revealed to him professionally? is, we conceive, easily answered. Mrs. Cunningham contemplated the commission of a crime which would, if successfully carried out, have seriously injured the interests of other parties. It was absolutely necessary to the success of the plot that a physician should be made cognizant of the whole details, and induced to work in harmony with others. Whatever guilt was attachable to any one concerned in the criminal act would be equally attachable to him. When Mrs. Cunningham, therefore, informed Dr. Uhl of the fraud which she intended to perpetrate, and requested him to become a party to it by an attendance on her during the pretended accouchment, she virtually asked him to criminate himself by aiding her to play the villain. The oath which Dr. Uhl subscribed to on the day of his graduation was never intended to impose silence on him under such circumstances. His duty to himself, to society, and to the miserable woman was perfectly clear. When the proposition was made, he ought immediately to have declined having anything to do with it; he should have given her distinctly to understand that he would not consider himself bound to withhold his evidence against her in the event of the crime being committed; and lastly, he should have seriously warned her against the criminal course she intended to pursue. In neglecting to act in this manner, pursuing, indeed, a most opposite course, and *not* in betraying professional secrets, has Dr. Uhl, in our opinion, acted unprofessionally, and laid himself open to the severest censures of his confreres. Instead of firmly and manfully refusing on the instant to have lot or part in the fraud, he willfully deceives Mrs. Cunningham by accepting with apparent eagerness the terms of her proposition. He not only does this, but he informs District Attorney Hall of what has transpired, at whose request, moreover, he consents to act out a falsehood, and by so doing lead on a female to the commission of a crime. We have yet to learn that such an act is either morally right, or one that is becoming in a member either of the legal or medical profession. It is the undoubted duty of all to prevent the commission of crime, and to aid in its detection when committed; but who ever tempts his fellow to do a criminal action by placing facilities in his way, ought certainly to be considered an accessory, and judged accordingly. Dr. Uhl has acted unprofessionally also in becoming the agent of Mr. Hall, a sort of detective or spy in the service of that gentleman. Had he, when he lodged information with the authorities, washed his hands of all further connection with the deceit, we cold have nothing to say against him; but by becoming the very life and soul of every move in the deception, he prostituted the noble profession to which he belongs, and should, as a punishment, be deprived of the status he holds in that profession.

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From the Virginia Medical Journal.

## *Lecture on Cancer Cures and Cancer Curers.* Delivered at the Grosvenor Place School of Medicine, July 8, 1857. By T. SPENCER WELLS, F. R. C. S.

GENTLEMEN—So much has been said lately about certain pretended cures of cancer, and so much interest has been excited by trials of a variety of caustics, with the hope that they might replace the knife in the removal of cancerous tumors, that I think you should be acquainted with the present state of the question. I shall, therefore, devote this lecture specially to an account of some of the persons who have been most notorious as "cancer curers," making a few remarks on the relative value of the knife and caustics in the treatment of cancer, and conclude by pointing out such means as may enable you in many cases to dispense with either one or the other.

The cases you now see are, I presume, chiefly in hospital practice, where you are not likely to meet with the "cancer curers." I may as well, therefore, give you one or two instances of the sort of cases you may meet with in private. In the year 1853 I was sent for to see a gentleman well known in the higher ranks of London society. He had a malignant tumor beneath the angle of the left jaw, and his case is so excellent an example of the way in which people with cancer run about, first among the surgeons and then to the cancer curers, that I will relate it at some length. This gentleman first complained of a sore in the inside of the left cheek. He fancied he had bitten it. Then it was thought that a decayed tooth had caused it, and the tooth was extracted. Then caustic was used. Still it did not get well, and Mr. Fergusson was consulted. He excised the diseased part; a good deal of bleeding followed, and styptics were used freely. Some time after, swelling came on beneath the jaw, and Mr. Lawrence was consulted. He said the disease was malignant, advised attention to the general health, and a course of sarsaparilla. Then I was called in. The skin at that time was on the point of giving way. I employed congelation by Dr. Arnott's process. This did some temporary good. It gave relief to pain, and I felt pretty sure that it retarded the growth of the tumor. However, the patient was not content with that, and Dr. Marsden was sent for. He advised a very generous diet. Soon after this the skin gave way, and carrot poultices were used. Then came the turn of the cancer curers. Dr. Pattison was sent for, and had sense enough to see that he could do nothing, but made the most of the case, of course, by saying that if he had been called in at first he should certainly have effected a cure. Then a German empiric was heard of who was doing wonders somewhere on the Rhine, and he was written to. He offered to come over for five hundred pounds, and ultimately an arrangement was made to give him three hundred. He came, saw, and conquered—not the disease, but the patient. He applied a very strong caustic one Monday; on Tuesday it had destroyed the coats of a large artery, which gave way, and the patient bled to death in a very few minutes.

Every one who has seen much practice in town could tell such stories as these, but one I have heard Dr. Jenner relate is most striking. He was called one morning, seven or eight years ago, to see a lady who was said to have fainted. He found a lady dead in bed, and a cancer curer just about to re-apply a dressing upon the breast of the dead woman.—This person was so ignorant of medicine that he did not know she was dead; he was horror-struck when Dr. Jenner told him so, and had just before assured the husband that his wife was going on well, and would soon be cured. The quack was not punished. The husband and friends were ashamed of having been duped, and they kept quiet.

Hume is not the first nor the only philosopher who has remarked how constantly mankind is deceived by the very same tricks played over and over again. "In spite of all warning, we see one generation after another, with their eyes wide open, walk into the same gulf of fraud, quackery and imposture." This is especially true in regard to medicine. Large fortunes have been made by the sale of a single nostrum. Perkins sold thousands of his "tractors" at five guineas a pair. Mesmer, and Deslon, his pupil, magnetized many thousands of pounds into their pockets. The fortunes made by Mayersbach and Schweinforth in London in the last century were splendid, and at the present day more than one empiric has the art of attracting crowds from every part of Europe, to some obscure German village. Some of these people may not do much absolute harm, but we are not without instances of victims to quackery in every class of life. Horace Walpole gives us a list of several distinguished sufferers. "Sir Robert Walpole," says Horace, "was killed by a lithotripic medicine; Lord Bolingbroke by a man who pretended to cure him of cancer in the face; and Winnington died some time after, by the ignorance of a quack who physicked and bled him to death in a few days for a slight rheumatism." There is no man now in large practice who could not add to this list some victim of the quackish follies of the day; and it becomes our duty to enquire why the public are so apt to think favorably of those who profess to possess secret remedies for diseases which are considered by regularly educated members of the medical profession to be incurable.

Now there are various reasons for the success of empirics; but the principal reason is, that in many cases where honest men give no hope, the quacks promise health and life; and the patients, like drowning men, catch at every twig and shadow. Then there is a love of novelty, and the benevolent desire to promote any thing which promises to relieve pain or save life; and an English feeling of giving fair play to everybody, and not allowing any class of men to exercise a monopoly of the healing art.. Then self-love comes into play. People are apt to be led away by confident assertions; they espouse a scheme warmly, and say so much in its favor, that when the bubble bursts they find it difficult to confess their error. When the imposition is discovered, the partisan is ashamed of having been duped, and holds his tongue. Even those who have suffered both in health and pocket think it better, for the sake of their own reputation as sensible people, to keep quiet. Probably such reserve would be less frequent, if it were considered that others suffer from a perpetuation of the delusion, and the deceptions would be acknowledged as soon as discovered. This duty, however, is overlooked; for while actions for malpraxis are not unfrequent against medical men, it is rare to find an empiric arraigned. Yet the late Lord Gardenstone took the trouble to enquire for a number of persons who had actually attested marvelous cures, and found that more than two-thirds of the number "died very shortly after they had been cured;" and I shall show you presently that we are not without similar results of equally marvelous cures in our own day. I think this should teach us all a lesson. We have chosen the profession of medicine. It is our duty, our business, to study how to cure disease; and we ought never to look upon any disease as incurable, never to give up any case as entirely hopeless; for "the extinction of hope is the extinction of endeavor." Let me impress upon you, then, the duty of looking upon diseases commonly considered incurable in a more hopeful spirit—regarding them only as incurable because our art is imperfect, and of searching diligently for a remedy which may remove the imperfection. We may thus keep hope alive—we may alleviate where we cannot cure, soothe where we cannot save; and even if the patients are not directly benefitted, their indirect gain will be great if they be preserved from the snares of ignorant imposters.

There are some special reasons why, of all the different classes of empirics, the "cancer curers" should attract a large share of public attention. Cancer has been too generally treated and regarded by medical men as incurable, and the frequency of the return of the disease after the removal of a cancerous tumor by the knife is confessed by all honest men. Then there is the natural fear of the knife; and, on the other hand, the bold assertions and confident promises of the cancer curer.—These persons all tell the same story. They exaggerate the pain and danger attending excision; they endeavor to persuade the public, and even their patients, that the use of their caustics is not attended with much pain, and with no loss of blood. They call innocent tumors cancer. They conceal unsuccessful cases; so do those who were ashamed of having been imposed on; and medical men will not incur the charge of jealous rivalry by making them known. Lastly, they assert that, while relapse is the rule after excision, it is the exception after the removal by their caustics; and they have a theory, which looks plausible enough to the public, explaining why this should be: they say they remove the roots, which the knife does not.

This notion of the roots of cancers, leads me to say something about Plunket and Guy, cancer curers of the past century, who adopted it, just as it has been adopted by two American physicians, Dr, Pattison and Dr. Fell, who have treated cancers by secret remedies in London for some years past. The notion is, that their applications not only destroy the tumor itself, but penetrate, by a sort of intelligent power, or elective affinity, in certain directions, corresponding exactly with these supposed roots of the cancer—eating away or drawing out those roots, without affecting the sound flesh into which they are ingrafted. On removing such tumors they show filaments of hardened cellular tissues, or portions of subjacent muscle, keeping up the connection; and on the tumors they preserve in bottles, they show similar prolongations, or shreds, hanging into the spirit in which the tumors are preserved. These are, in all probability, merely portions of the surrounding tissues which have been destroyed by the action of the caustic. Possibly these supposed roots may have given rise to the tern "cancer"—the crab holding firmly with its claws the prey it had grasped. However this may be, you can see at once how likely such reasoning is to affect the imagination of patients.

Plunket practiced as a cancer curer in London, in the ealry part of last century. He is said to have known little or nothing of surgery in general, and to have practiced from the traditionary directions of his namesake, formerly an empiric in Ireland, who left the receipt for his medicine, with direction for its use, to Steven's hospital. Guy, who was a member of the "Corporation of surgeons," purchased the secret of Plunket about 1754, and in his account of the medicine, says it had been known by the name of "Plunket's poultise," and had been used by Plunket and his ancestors for more than a century. A controversy took place between Guy and Gataker, and in the Lloyd's Evening Post, March 5th, 1760, old Plunket gives his own receipt, as follows: Crow's foot, which grows in low ground, one handful, dog fennel, three sprigs, well poundered; crude brimstone, three middling thimbles full; white arcenic, the same quantity—all incorporated well in a morter, then made into small balls, the size of nutmegs, and dried in the sun.

Sir Charles Blicke, with whom Abernethy served his apprenticeship, used Plunket's caustic very much in the treatment of cancerous sores and his pupils used to be employed in gathering ranunculus and dog fennel, and making them into the paste.

It is curious to remark how imitative even great discoverers may be.—The escharatic effects of arsenic had been known to the Greek and Roman physicians—they had not been forgotten in the middle ages. The mineral had been used for centuries in the removal of cancerous diseases.—Plunket adds some crow's foot and dogfennel to it, and becomes a great cancer curer in London. The chloride of zinc is proved to be an excellent caustic, by Hancke, Canquoin, Alexander Ure, and others. They even use it to remove malignant groths. Dr. Fell adds some sanguinaria conadensis to it, and four gentlemen of the very highest character and professional position, expressing no disapproval of the use of a secret remedy, and without *trial* of the unaided powers of the vegetable, publish a certificate on Dr. Fell's "mode of treatment," complimenting it as "ingenious, safe, and easy of application."

It was Guy's caustic, or rather the Plunket's paste, that killed Lord Bolingbroke, and many others were poisoned by the local use of arsenic; yet this did not prevent Lord Arundel from buying the receipt of the wife of a blacksmith, so ignorant that she could not sign her name, but a noted cancer curer, named Elizabeth Fellow. This was long known as Lord Arundel's cancer cure. It was an arcenical powder, and a wash of corrosive sublimate, and no doubt killed a number of poor women — However, like Plunket's paste, a great many cancerous and other tumors were removed entire by it; and Mr. Justamond, who was surgeon to the Westminister hospital some seventy or eighty years ago, tried them both very extensively, arriving at the conclusion that the advantage gained did not compensate for the risk incurred. * * * *

Landolfi, a Neapolitan physician, may be looked upon as the prince of the cancer curers. He has been decorated with orders of knighthood by sovereign princes, has been alternately flattered and abused, and has made an immense fortune. He made no secret of his plan. "Landolfi's paste," as his caustic was called, was composed of equal parts of the chlorides of zinc, brimstone, gold and antimony, made into a paste with flour or liquorice powder. Sometimes he used the cloride of bromine alone, using it both externally and internally; and when the slough had been formed, he used lettuce poultices till it separated. There can be no doubt that Landolfi removed an immense number of cancerous tumors by his paste in Italy, Germany and France, and that healthy granulations sprung up, and firm cicatrices very often resulted. He used to assert that out of four thousand caces of cancer he had treated, the disease had not recurred in three thousand. This was what he *said*. He never offered any thing like *proof* of the truth of this statement; and when his caustic was tried in the hospitals of Vienna and Paris the conclusions arrived at were that it was decidedly inferior to the chloride of zinc. Landolfi went himself to Paris, and a number of patients were treated by him in the Salpetriere, under the inspection of a committee of hospital surgeons. Their report was published, and my colleague, Dr. Deville, has just favored me with a copy. The conclusions are, that the chloride of bromine, which is the only peculiarity in Landolfi's treatment, is [illegible] useless as an internal remedy; and that locally it only acts as a [illegible] raising the epidermis, and exposing the denuded part to the action [illegible] chlorides of zinc and antimony; acting, you observe, just as the ra[illegible]culus did in Plunket's paste, the nitrate of silver as used by Justamon[illegible] or like any common blister. The committee reported that the pain produced by this caustic was excessive, and that it did not secure the patients from the danger of erysipelas or hemorrhage. Landolfi does not appear to have been more successful in Germany than in France. In November 1853, he was called to the reigning duchess of Anhalt-Cothen, to remove a cancer of the breast. In January 1854, Dr. Brunn, a member of the superior medical council of the duchy, published a pamphlet on Landolfi and his method, in which he announced his success [illegible]omplete; yet on the 13th of July 1855, the duchess died of a return[illegible] cancer of which Landolfi had cured her. Other cases treated at [illegible] and Munich died or relapsed. He treated Dr. Seyfert at Dresden, and he died. He treated a prince of Prussia, and was decorated with the order of the Red Eagle; but here again *cure* meant *cicatrization;* for I have been assured that the disease was cancroid of the face, and that it has returned. Dr. Valentini of Berlin tried the method in 43 cases, and published an article in July 1854 in its favor, but in July 1855, only one year later, he wrote to say that it had entirely disappointed him. So at Vienna, in October 1854, Dr. Weinberger published reports of 33 cases treated before him by Landolfi. One of the cases reported as cured relapsed while Dr. Weinberger was correcting his proof; and ten months later he wrote, that in cases of medullary cancer the disease "always returned, even before the cicatrization of the wound," and that the internal use of the chloride ef bromine had no influence whatever in preventing relapse. Landolfi by ministerial authority *selected* six cases himself at the Vienna hospital, and treated them under the observation of a committee, yet he only cured one, and that was an innocent tumor, a partial hypertrophy of the manma, for which he destroyed the whole breast quite unnecessarily, and produced a large unsound cicatrix. He wrote to the French commission to say that the effects of the application of his caustic in France were in all respects similar to those he had obtained in Germany and Italy; and so we fine them. Of nine caces of cancer of the breast treated by Landolfi himself at the Salpetriere, two died; in four.

the disease was aggravated; and in the three in which cicatrization took place, the disease reappeared. Nor one of the nine was cured. He treated three cases of cancroid, and cured one. In a second, the disease reappeared after cicatrization, and in the third it was much aggravated. So much for the three thousand cures of four thousand cases. Well may the French committee add that Landolfi's method "adds another to the illusions that so abound in the history of cancer."

Dr. Pattison, as you may be aware, some three, four, or five years ago, occupied much the same position in London that Dr. Fell does now.—Both are physicians with American diplomas, who have professed to cure cancer by secret remedies, who have treated a great many patients, and have published accounts of their treatment. The difference between them is, that Dr. Fell has at length made known the composition of the remedies he employs, while Dr. Pattison has not; although it is pretty generally believed, and not without ground, that the essential part of his preparations was the dried sulphate of zinc, which Dr. Simpson showed in the Medical Times and Gazette a few months ago was a most useful caustic. Dr. Pattison has not been heard of so much since the arrival of Dr. Fell. Indeed the disappearance of one and the advent of the other supposed not to have been altogether without concert. Where Dr. Pattison may be now, I cannot say, but his publications remain; and I can tell you something about some of the cases he has treated. A report of one of these used to appear in the form of a declaration sworn before the provost of Glasgow, that the patient was cured by Dr. Pattison, after having been regarded by Mr. Syme of Edinburgh as hopeless. Mr. Syme informs me that the patient was a small farmer, who had a sore at the corner of his nose. Mr. Syme applied the chloride of zinc to it, but the man went to Dr. Pattison, and so far from having been cured by him "died in great misery after several journeys to London." Mr. Syme informs me that a case of cancer of the breast which had returned after operation, and which Dr. Pattison boasted he had cured, is not cured, but that the lady is dying; and that another lady, upon whom Mr. Syme declined to operate for cancer of the tongue, died under Dr. Pattison's care. These are cases which the public never hear of, but which really ought to be made known. In 1855 a book appeared, entitled "Cancer; its true Nature, Treatment and Cure. Illustrated by Cases. By John Pattison, M. D. 31 Dower Grosvenor street." Most of these cases are given so indefinitely, as "Mrs. H. from Essex," "Mrs. J. aged 54," "Miss———, age 27," "Mrs. A. of Hammersmith," "D. C. from Scotland," and so on, that it is impossible to find out how far the cures related are correct; but there is a clue to some of the cases, particularly to those treated at Glasgow; and I wrote to Dr. Macleod, a most able surgeon of Glasgow, to ask him to make enquiries about them.*

I am sure, gentlemen, I need not trouble you more with Dr. Pattison's cures. I have made enquiries myself about others, and I have only found *one* in which the cure was permanent, and that was a case of a small superficial sore on the face, possibly malignant, possibly not.

I do not mean to say much about Dr. Fell. His position is somewhat peculiar; for though he used a secret remedy, he was very open in exhibiting its effects to medical men, and he has lately made known its composition, in compliance with an agreement entered into with the surgeons of the Middlesex hospital, in a book he has recently published. In his preface he talks of the "gratitude of a multitude of cure patients;" but, as the treatment of the earliest case he has recorded as treated in England was commenced July 1855, and the lady died with pulmonary complication in the following April, and the other cases are of much later date, it is obviously absurd to talk of *curers*, when only a few months have elapsed after cicatrization. I know of cases in which the disease has returned after removal by Dr. Fell himself, and that in a much shorter period than two years; and, looking upon the essential part of his treatment to be the local use of chloride of zinc, it appears to be most unlikely that the results will differ from those obtained by Canquoin and others by the use of the same caustic. The report of the surgeons of the Middlesex hospital was drawn up within two months after the treatment was commenced there. I may tell you that Dr. Fell has not published all his formulæ in his book. At the Middlesex hospital he uses an ointment containing snuff and acetate of copper, and another mode by boiling stramonium leaves in lard; but the chloride of zinc is the caustic by which the tumor is destroyed; the sanguinaria and cochineal added to it are probably of nearly equal efficacy, and the after-dressings of comparatively little importance.

All this leads to the very important question of the relative advantages of the knife and caustics in the treatment of cancer. The advocates of caustics say that when the morbid growth is removed by the knife, if it be really cancer, there is almost certain to be a recurrence of the disease within two years, either in the cicatrix or in some other part of the body; that the disease makes more rapid progress than when the patient is left alone, and therefore that he is in a worse position than before. They say,

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*Of these cases, only two were cured—one a superficial ulcer on the face; the other, a varicose ulcer of the leg.—*Ed.*

further, that it is often impossible to remove every particle of disease tissue with the knife; and that the operation itself is sometimes fatal, either immediately from shock, or indirectly from pyæmia or exhaustion.

On the other hand, the opponents of caustics say, that no caustic can do more than the knife towards removing the cancerous diathesis. They admit that the morbid local growth can be removed, but they assert that the patient is not in a better position, frequently in a worse position, than if the knife had been used. Under the influence of chloroform, the tumor may be removed in a few moments without suffering to the patient, and every portion of diseased tissue can be removed if proper care be taken; while the action of caustic is very slow, often excessively painful, and is sometimes apt to extend beyond the diseased to the healthy surrounding structures. They add, that during the operation of the caustic the patient is not free from the danger of hæmorrhage, erysipelas, or pyæmia, and that the general health is very apt to suffer from the long continued pain and local irritation.

Now I am disposed to look upon all these arguments as quite secondary to the great question, which mode of removing the tumor is most likely to be followed by relapse. The advantages and disadvantages of the two methods are pretty equally balanced in other respects; and I apprehend we shall find them, even in this respect, also pretty equal. Statistics collected with a good deal of care show that about eight cases out of every ten operated on by the knife return in two years. Dr. Fell says that only three out of ten treated by him returned within the same period. One good effect of the trial given to his treatment at the Middlesex hospital will be that the truth of this statement will be tested. At present you must take it for what it is worth. Landolfi said something of the same kind, yet I have given you the results he obtained at the Salpetriere.—Pattison harped on the same string, and I have shown you how far he succeeded in preventing relapse. As to Plunket and Guy, and those who used arcenic, I need only remind you of the fact that their remedies have fallen into disuse, although they were employed long enough to establish their reputation all over the world, had they really possessed the powers attributed to them of curing cancer.—*Va. Med. Journal.*

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## *Asiatic Cholera, and Cholera Morbus.* By Th. Polland, M. D.

We believe Asiatic cholera to be cholera morbus in *epidemic* form; and it may not be inappropriate at this season to give some reasons drawn from analogy, and facts for this belief. We are aware that many, posibly a majority of the profession do not admit the diseases to be the same, and look upon Asiatic cholera "sui generis." We are the more induced to say something on the subject at this time, as we have been hearing of sporadic cases of *Asiatic* cholera; and as we hear of them every summer from men of high standing and authority, and whose opinions have weight, both among the medical and non-medical public, whose fears are aroused, and whose anxiety about personal safety and injury to business is not inconsiderable. This belief, so common in the prosession, we are convinced has arisen from want of reflection, and we have been rather astonished at the idea that epidemic or Asiatic cholera is a new disease, originating about 1817. That this affection was first apparent in Europe about 1830, is a matter of history. Why it never spread from the east to the west before this time, we know not. Possibly the increasing commerce of the world had some agency; but as this might involve the doctrine of contagion, we do not design to express any opinion to this effect, and merely mention the fact.

That cholera morbus existed in an epidemic form at an early age, is plainly evident. It is described by Aretæus and Paulus Ægineta,* and by Cœlius Aurælianus, the latter of whom observes it is "a torment of the bowels, looseness and oppression of the præcordia, vomiting of humor and yellow bile, succeeded by matter somewhat resembling the white of an egg; also great heat, insatiable thirst, tension of the sinews and calves of the legs and arms; præcordia drawn upwards, with pain like that of the iliac pas ion—the countenance being collapsed, and the eyes red."

Bontius, a Dutch physician, writing in 1629, says, in describing *cholera morbus* at Batavia, "It is extremely frequent. In the cholera, hot billious matter irritating the stomach and intestines is incessantly and copiously discharged by the mouth and anus. It is a disorder of the most acute kind, and therefore requires immediate application. * * * *Those who are seized with the desorder generally die, and that so quickly as in the space of* 24 *hours at most.*"

He also mentions the weak pulse, difficult respiration, coldness of surface, restlessness, cold sweat, also spasm, which he says exists much less than in the Indies, and cites on case of the steward of the hospital in his country who died of this disease, with convulsions, in six hours. Though he does not say the disease was epidemic cholera, he has evidently and truly portrayed that disease.

Sydenham describes an epidemic cholera morbus in 1629 as follows:

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*Vid. Bell and Condie on Cholera, p. 143.

"Immoderate vomiting, and a discharge of vitiated humors by stool, with great difficulty and pain; violent pain, and distension of the abdomen and intestines; heart-burn, thirst, quick pulse, heat and anxiety, and frequently a small and irregular pulse; great nausea, and sometimes colliquative sweats; contraction of the limbs; fainting, coldness of the extremities, and other like symptoms, which greatly terrify the attendants, and often destroy the patient in 24 hours."

And again, in a letter to Dr. Brady, he says that "at the close of the summer (1676) the cholera morbus raged epidemically, and being rendered more severe by the extraordinary heat of the season, was accompanied with more violent and inveterate convulsions than I had hitherto observed; for not only the abdomen but all the muscles of the body, and especially those of the arms and legs were effected with terrible spasms."

Dr. Paisley, who wrote in 1774, speaking of cholera morbus, says, "It is often epidemic among the blacks (natives,) whom it destroys quickly, as their relaxed habits cannot support the effects of sudden evacuations nor the more powerful operation of diseased bile." He also says, "When it is epidemic here it is totally a disease of highly putrid bile, which operates on the system *as a poison, and brings on sudden prostration of strength, and spasms over the whole surface of the body.*" These latter remarks refer to the years 1769-70.

Sonnerat, who traveled in India in 1774 to 1781, says, "There is another epidemical disorder which reigns, and in 24 hours or less carries off those it attacks. The symptoms of the disease were a watery flux, accompanied with vomiting and extreme faintness, a burning thurst and oppression of the breast, and a *suppression of urine.* They were often without pulse, the hands and ears were cold, the face lengthened, and eyes sunken."

He also describes spasms and colicky pains as being attendants on this affection, which was evidently epidemic cholera.

British army officers mention a similar disease which prevailed in 1775, at Mauritius, and in 1781, Mr. Jameson, secretary to the Calcutta medical board, says, "A disease resembling cholera attacked a division of Bengal troops of 5,000 men, with inconceivable fury. Men dropped down by dozens, with dreadful spasms of the extremities and trunk, and vomiting and purging, and some died in an hour."

Curtis, surgeon in the English navy at Madras, says, the "mort de chien, or cramp, had been very frequently and fatal among the seament the sickness being attended with vomiting, purging, coldness of extremities, sinking and lividity of the face, the eyes sunken, the pulse scarcely, or not at all perceptible, great thirst, soaken condition of the hands, cramp, thin, watery, mucous discharges from the bowels, spasms, but with clear and undisturbed intellect to the last."

The "Bengal report" states, that in April 1783 cholera destroyed 20,000 people, on an occasion of a festival.

Dr. Duffin of the English army in India, says, "In 1884, cholera morbus rages with great violence, and is so rapid in its progress that many of the men are carried off in twelve hours. They are seized with nausea, frequent heats and chills, then cold sweats, severe griping and purging of *bilious* colluvies."

Dr. Davis, describing the same epidemic, speaks "of the bladder being empty and contracted," and Mr. Thompson mentions the same thing.

Dr Jas. Johnson, in his work on Tropical Climates, describes cholera in the east in 1804; and after giving the history of a case, says "This may serve as a specimen of that dreadful disease which has obtained the appellation of , mort de chien' or death of the dog."

Other observers in the east have described this affection as prevailing in 1790 and 1814, calling it "epidemic cholera morbus," "cholera," and "cholera asphyxia"—the name of *Asiatic* cholera being first given to the epidemic which started in the east in 1817, traveling west—another instance of a *new* name misleading, and including the belief of a *new* disease.

Apart from fact, analogy supports the belief of the identity of the two diseases. All observers are aware that epidemic and sporadic disentary differ considerably in their intensity, in some of their symptoms, and in prognosis—sporadic dysentery in our climate being rarely fatal; epidemic dysentery frequently so. So of erysipelas—in its sporadic form its tendency is to recovery—in its epidemic character it is often fatal, particularly in hospitals, and in that form called "black tongue," and in that variety attacking the peritoneum, for it is well ascertained that when the disease is epidemic, it is apt to be communicated by nurses and physicians, and probably through the atmosphere, to lying in women, constituting a fatal form of puerperal fever. And these remarks apply generally to epidemic disease, which is almost always more severe than when sporadic, and always assuming new appearances and symptoms.

Several points of diagnosis between cholera morbus and Asiatic cholera have been laid down. Among them it has been stated by Watson and others, that in the latter the discharges show an evidence of want of secretion of bile, while in the former they are billious. I am sure every one's observation will disprove this assertion. In mild cases only of cholera morbus a copious secretion and discharge of bile speedily occurs, and stops the disease, while in all violent cases there is almost always an entire absence of bile in the evacuations. The older writers describe common cholera as being generally attended with absence of bilious discharges; and on the other hand, some of these writers, as already quoted, speak of the subjects of epidemic cholera morbus (evidently our Asiatic cholera of modern times) as "being overcome by the more powerful operation of diseased bile," thus rendering it probable that there is no invariable rule on this point, though the general rule, as we have stated, is that in violent cases of this disease there is absence of bile in the secretions.

Another point of difference is stated to be "suppression of urine" in Asiatic cholera. Now it is evident that this is a symptom dependent on prostration and want of innervation, and may occur as well in fatal cases of sporadic cholera as of Asiatic. Again we are told the convalescence is tedious in one affection, and rapid in the other, and that secondary fever follows only Asiatic cholera. We admit Asiatic cholera is attendant with more prostration, graver symptoms and longer collapse than in sporadic cases, and the longer an organ is congested, the more probability there is of inflammation and consequent secondary fever.

Another point of distinction is said to be that cholera morbus is brought on by imprudence in eating, and Asiatic cholera is not. Where a disease is epidemic, and the whole atmosphere loaded with poisonous material, it of course requires less exciting causes to develop the malady than when the atmosphere is healthy. It is, however, a matter of history that the badly nourished, badly arid and imprudent portion of the people are those who are subject to Asiatic cholera. A man living in a well ventilated, dry apartment, who is temperate in eating and drinking, and regular in hours need not fear cholera, even though he live in the impure atmosphere of a diseased city. Possibly cholera may sometimes affect such a person, and we sometimes hear of men in the better walks of life being its victims, but we believe if the history of these individuals could be known, it would be found that they had committed some imprudence in the use of diet or alcoholic drinks, or lost rest, or in some way impaired the strength and tone of the digestive apparatus; for imprudent drinking particularly will do this as effectually as improper eating.

And again—some, hard pressed for differential diagnosis, tell us that cholera morbus is rarely fatal. This is true; but this is true of all sporadic disease compared with epidemic. Cholera morbus too, including cholera infantum, is more fatal than some are willing to admit. In Philadelphia, in ten years ending January 1, 1832, from the report of the board of health, the deaths from sporadic cholera were 2,437, of which 114 were over ten years of age, and this too at a time when the population was small as compared with the present.

Those who dwell on the rare fatality of cholera morbus, are, we suspect, those who, seeing a very severe case of sporadic disease, pronounce it Asiatic cholera, because they discover here, particularly if the patient is moribund, all the symptoms they ascribe to Asiatic cholera.

We design to say a few words of treatment, which, reasoning from analogy of the most successful treatment in sporadic cholera, and from facts and statistics, we believe to be *opium*. We would not neglect other remedies and adjuvants, calomel, counter-irritants and stimulants, but we look on this one medicine as the sheet-anchor, and we have often asked the question, with what other remedy can you restrain the vomiting and purging to prevent collapse, and give your calomel an opportunity of acting on the liver? and have never obtained a satisfactory reply. We have been told that in some caces there is death without vomiting and purging.—These caces are very rare, and form the exception, all observers and authors agreeing upon the general fact that diarrhœa and vomiting are the precursory symptoms of Asiatic cholera; and in cases of death without vomiting and purging, post-mortem examination has proved the intestines are loaded with effused serum, which probably was not thrown off per anum from want of muscular power, the poison having produced sudden sedation and prostration of the whole nervous system. Possibly opium given early in these would have allayed the irritation of the mucous membrane, have produced regular distribution of nerve power and given time for remedies, and the "vis medicatrix" to have had fair play.

The writer of this has seen cholera supervene while the system was fully under the influence of mercury; and we are much disposed to coincide with those who have expressed the opinion that the secretion and discharge of bile and return of the secretions is rather the *effect* than the *case* of the system righting itself, and that the "post hoc, propter hoc" reasoning has been applied to the action of calomel in cholera.

We have never been a believer in the *congestive* action of opium in cholera. By subduing neuro-sthenia and equalizing irregular distribution of nerve force, we believe it is decidedly *anticongestive* in this as well as other affections. Improperly used in checking secretion, and producing constipation of the bowels, it may prove congestive to the brain and other organs, but this cannot apply to cholera.

In this connection we may properly allude to the statistics furnished by the "report of the London board of health,"* to which are attached the distinguished names of Drs. Pain, Alderson, Babingson and Tweedie. 2,749 well developed cases of cholera are reported, the general per centage of death following each plan of treatment being of

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*Vide Va. Med. and Surg. Journal, July 1855, p. 89.

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| Eliminants, | 71.7 | per cent, |
| Stimulants, | 54. | " |
| Alteratives (calomel and opium,) | 36.2 | " |
| Astringents (chalk and opium,) | 20,3 | " |

It is proper to state that of the 150 cases treated with the chalk and opium with such favorable results, not one-third had entered the stage of collapse, while of the 166 treated by salines, three-quarters were collapsed; and of the 124 cases in which caster oil treatment was adopted, all but 12 were in collapse. Still this testimony is very strong in favor of the opium treatment.

The fairest test is to take the collapse cases, and draw the comparison, the fatality being as follows:

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| Calomel and opium, | 59 | per cent. |
| Calomel (large doses,) | 60 | " |
| Salines, | 62 | " |
| Chalk and opium, | 63 | " |
| Calomel (small doses,) | 73 | " |
| Caster oil, | 75 | " |
| Sulphuric acid, | 78 | " |

Here, though collapse had taken place, the opium with calomel was more successful than calomel alone; and it is in this state that opium has been so much condemned, and regarded by some, as fatal. Before collapse the opium treatment was, as evidenced by the first table, by far most successful.

Ten thousand coses of cholera diarrhœa were treated; and the committee say the sulphuric acid treatment was the most efficacious ever practiced—the saline treatment being least successful—and the calomel and opium next in efficacy to the sulphuric acid.

In a disease, necessarily so fatal as cholera, when fully formed, diversity of opinion will probably continue to exist as regards treatment; but we conceive that every one who will fairly investigate the snbject, must come to the conclusion we have endeavored to enforce, that cholera morbus and Asiatic cholera are one and the same disease. Analogy, the fact that the same organs are affected in the so-called two diseases in the same way, and the additional consideration that a person dying with sporadic and another with Asiatic cholera, exhibit, as far as we can learn, the same condition of things, are all, we conceive, very strong evidences of the truth of our position.

If we succeed at all in allaying the constant talk every summer about "Asiatic cholera," we shall be paid for our trouble in prepairing this paper.—*Va. Med. Journal.*

## *Andrews on the Physiology of the three Registers of the Human Voice.*

At the request and with the assistance of Mr. C. M. Cady, Editor of the *Chicago Musical Review*, and well known talented ex-Editor of the *N. Y. Musical Review*, I have lately made some new investigations respecting the action of the vocal organs in singing, and have arrived at some conclusions which, so far as I know, are not to be found in any publication, and for which therefore I may claim originality.

Mr. Cady is a gentleman not only of high musical attainments, but also of liberal education, and of an unusually clear and analytic mind, so that with his assistance and suggestions I have been able to attain an explanation of facts which with most of our leading professors of music would have been impossible.

All educated singers understand that there are three modifications of the voice cultivated, which are called *registers*, and that in passing from one to the other the vocalist is conscious of some movement or change in the larynx.

The first, or the *Chest Register*, is that quality of voice produced by male singers on the lower and middle notes of their compass, and by the female on the lowest notes in her reach, for instance those below the middle C. This register is sonorous and capable of great power, and conveys to the ear a slight sense of roughness like the reedy tone of a clarionet. It is the tone adopted by the male in common conversation.

The second, or *medium register*, is that smooth mellow tone used by good tenor singers on the high notes and by females on the middle notes, for instance in the vicinity of G and A.

The third, or *head register*, is the clear flute like tone used by females on the high notes, for instance on the upper F and G. In the male voice the head register exists under the name of *falsetto*, but as it is not of good quality, the best authorities reject it as unworthy of cultivation in our sex, hence it is customary for musicians to say that the male voice has only two registers, the chest and the medium, while the female has three.—

Physiologically, however, the falsetto is the head register of the male, so that the three registers really exist in each sex. It may be proper to mention here for the benefit of those not familiar with musical terms, that the falsetto is that shrill forced tone capable of being uttered by the male, which resembles the female voice.

These three registers do not differ merely in *pitch*. They are different in quality. There are several parts of the scale which may be given in either of the chest or the medium register, and there are three others in the vicinity of C which a person can give at will in either the chest, the medium, or the head register, and in changing from one register to another on the same key, the singer is distinctly conscious of some action in the larynx.

It was the nature of this action which Mr. Cady requested me to investigate; the physiology of the whole matter being apparently unknown both to medical and musical writers.

The reader will pardon me if I here recapitulate briefly the anatomy of the larynx for the sake of perspicuity.

The frame work of the larynx is the cricoid cartilage which has the form of a ring. Upon the upper edge of this is articulated in front the thyroid cartilage, and posteriorly the two arytenoid cartilages. These three serve as pegs for the attachment of the vocal ligaments. The vocal ligaments consist of a pair of tendons attached to the thyroid cartilage anteriorly, and running one to each arytenoid cartilage posteriorly. Each one is connected to its own side of the larynx by a fold of mucous membrane. Thus each one has the form of a half moon with the tendon in its straight edge, and when they are put upon the stretch so as to bring the edges in contact, the two form a perfect diaphragm across the larynx. By this arrangement, therefore the motion of the thyroid cartilage forward and of the arytenoids backwards will put the ligaments upon the stretch across the larynx. The two arytenoid cartilages have the form of levers bent to a right angle. The fulcrum is at the angle where they are, articulated to the edge of the cricoid cartilage. The long arm of the lever projects upward into the cavity of the pharynx, and the short arm called the anterior process projects horizontally forward into the larynx; it is the short arm to which the vocal ligament is attached, *so that whatever motions the anterior process of the arytenoid cartilages make, the vocal ligaments will partake of.*

The arytenoid cartilages are so articulated as to allow of motion in all directions. Therefore, if the points of the anterior processes rotate outward, they will carry the edges of the two vocal ligaments asunder and leave a wide space for the passage of the breath, but if they are rotated inwards so as to be applied against each other, the vocal ligaments will have their edges brought into contact, and if the ligaments are put upon the stretch and air forced through the crevice between them, a vocal sound is produced.

It will be observed that the conditions under which the vocal ligaments act in uttering sound, are identical with those of the lips in blowing a sax horn or any of the trumpet instruments. In the latter operation, the lips are drawn tightly across the mouthpiece of the instrument and the breath driven through the crevice between them. In the larynx, the vocal ligaments are stretched across the cavity and applied to each other in the same manner. The ligaments however being thinner, give a more delicate sound than the lips. *The human vocal organs act on the principle of the trumpet.* It is important to be clear on this point, otherwise the subject of the register cannot be understood. That this is the method of vocal action, I have proved both by experiment and by *actually seeing the human vocal chords in action in the living subject.*

To try the experiment, take two slips of sheet india rubber and tie them tightly over the end of a tube, for instance the large end of a wooden stethoscope: let them be tightly stretched on, covering the whole end except a very minute fissure between their two edges. If you now put the small end to your mouth and blow, a clear musical sound will be produced, and the edges of the rubber may be distinctly seen to vibrate.

Some months ago, I saw the rare spectacle of the vocal ligaments exposed to sight in a living person.

A. B., in a temporary fit of insanity, cut his throat with a razor. The wound was of enormous size and, of course, gaped widely. The cutting instrument had shaved off the top of the larynx completely, just above the vocal ligaments, exposing them to full view. The patient had not severed any large vessels, and at the time I was called in, was free from delirium.

The arytenoid cartilages were seen on the posterior edge of the larynx, the superior processes pointing upward into the pharynx as usual, and the anterior processes rotated outwards so as to leave a wide angle between them, and the points rested against the sides of the laryngeal cavity. The vocal ligaments therefore were carried outward and folded against the alæ of the thyroid cartilage, so that the opening was large and the respiration silent and easy. The opportunity was too good to be lost, and at my request, the patient repeatedly uttered sounds while I watched the action of the organs. At every effort to speak the anterior processes of the arytenoids swung inwards, described about the eighth of a circle each, until they came in contact; this brought the vocal ligaments together, and they could now be distinctly seen stretched tightly over the whole opening like a diaphragm, and as the breath was expelled between them, the two coapted edges were easily observed to vibrate, while the sound was produced I repeated these observations until I was fully satisfied, and I regarded them with great interest, because such opportunities to see the vocal organs in action, must be extremely rare.

I consider therefore that I have clearly proved that the vocal organs act on the principle of the lips applied to the mouth piece of a trumpet, and not as Carpenter says, like the reed on a clarionett, still less as others have said, like a flute, like an æolian harp, like an organ pipe, or like a piano string.

The changes in pitch of the voice are accomplished as every one knows, by tightening or relaxing the vocal ligaments. This is effected by the action of muscles on the thyroid and arytenoid cartilages, to which the ligaments are attached. In the trumpet, similar changes of pitch are made by tightening and relaxing the lips. I have been thus prolix in prefacing this subject, because unless the foregoing points are borne in mind, the physiology of these organs cannot be understood.

The chest register, it will be borne in mind, is that peculiar quality of voice used by male singers on the low and middle notes, and by females on the low notes alone. It is reedy in character, conveying to the ear an impression of slight roughness, and giving a corresponding feeling in the larynx of the performer. It is accompanied by greater pressure of air in the chest than the other registers, as though the opening through which it is forced were smaller, and the resistance therefore greater. I suppose this quality of sound to be produced by *placing the edges of the vocal chords pretty firmly together*, so that they strike each other at every vibration. The proof of this proposition is first the analogy of other instruments, secondly the anatomy of the parts, and thirdly the sensations of the performer.

I have already shown that the larynx acts on the principle of the trumpet. Now if any one will experiment carefully with a sax horn or any similar instrument, he will find that like the human voice it has two registers corresponding to the chest and middle; but that it has not the head register for reasons that will be apparent presently.

The quality in brass instruments corresponding to the chest register, when carried to excess, is that harsh rattling sound which players technically call "tearing the instrument." It is frequently heard in the trombone, especially when played by one who is ambitious to make more than his share of the noise. The chest register is used by brass bands in outdoor martial music, while the medium register is more used when inside of buildings and on soft passages.

If the experimenter carefully notices in what manner he produces these variations, he will find that in the chest register he presses his lips more firmly together, and is obliged to use a correspondingly greater pressure of the chest to force the air through them. Like causes produce like effects, and it is fair to conclude that in the chest register of the voice a similar pressure of the vocal chords against each takes place. If so, then we readily see why a greater force of the lungs is requisite in expelling the air.

If we recur to the anatomy of the parts, we find the thyroarytenoideus muscles adapted to this very function. They arise from the anterior part of the concavity of the thyroid cartilage just external to the vocal tendoms, and running backwards are attached to the external processes of the arytenoid cartilages, so that by their contraction they rotate the anterior processes inward, and press the ligaments together, and this action I witnessed in the case of the attempted suicide above mentioned.

Now if we consider the sensations of the vocalist, we are still further confirmed in the opinion that the chest resgister is the result of the contraction of the thyro-arytenoid muscles; for in this register the singer is conscious of very great muscular effort in the larynx. On the high notes, this exertion becomes painful, hence the resort to the medium or head register for relief.

If we recur to the anatomy of the larynx, we find that the tension of the vocal chords on which the pitch depends, is regulated by the action the crico-thyroid muscles, which draw the thyroid cartilage forward thus tightening the chords.

Now the thyro-arytenoid muscles from their position tend to draw the thyroid cartilage backwards, hence these two pairs of muscles antagonize each other, so that when the thyro-arytenoids contract to rotate the arytenoid cartilages inwards and press the vocal chords together, they at the same time tend to relax the chords and lower the pitch of the sound, therefore the crico-arytenoid muscles in drawing the thyroid cartilage forward to raise the pitch, have to act not only against the physical tension of the chord, but also against the whole power of the thyro-arytenoid muscles. Hence to produce a high note in the chest register, causes a painful sense of muscular effort in the larynx, because the muscles which raise the pitch have to act against the whole power of the muscles which press the chords together.

Another proof that the chest register is the result of placing the edges of the chords in contact, is that the singer is conscious of a rough vibratory sensation as though the chords touched something.

Still another proof, and one which is perfectly decisive is obtained by the following simple experiment. Let one place his organs in position for a decided chest tone and then make the effort at expiration so gently as not to produce the sound. He will find that no air escapes, but that the passage of the larynx is perfectly closed showing that the vocal chords not only are in contact, but are pressed together with sufficient firmness to require some force to expel any air between them. If he now increase the force of the expiratory effort sufficiently to expel the breath, a marked chest tone is the result.

I think I have now given the physiology of this register with a completeness which no writer either medical or musical has before attempted.

After these explanations, the action of the parts in the medium register is more easily elucidated. In passing up the scale, the singer arrives at a point where the chest register becomes painfully laborious, he then changes to the medium register: immediately he is conscious of a diminution of pressure in his lungs, of some movement in his larynx, of a sudden sense of relief in the laryngeal muscles and of a greater smoothness in the quality of the tone. *The medium register is produced by partly relaxing the thyro arytenoid muscles, so that the vocal chords shall not quite touch at their edges, but leave a narrow space between them.* In this state, it is obvious that they offer a less obstacle to passage of the air than when they are pressed together for the chest register; hence the diminished pressure in the lungs, of which the singer is conscious. The production of the voice does not necessarily require contact of the chords. In the artificial larynx which I have constructed, the best tones are produced when the ligaments are slightly separated. Draper, in his physiology, also states that contact of the chords is not requisite, although he does not recognize the bearing of the fact on the registers. In like manner, as I proved that in the chest register the chords are pressed together, I will now show that in the medium register they are separated. If the experimenter will deliver a tone on the medium register and gradually diminish the pressure of the lungs until the sound stops, being careful to maintain the laryngeal organs in the same position, he will find that though the breath is too feeble any longer to produce a sound, it will still escape with a faint hiss from the larynx, demonstrating beyond the possibility of error that the vocal chords are not in contact. The theory accounts beautifully for the sense of relief in the laryngeal muscles. When the thyro-arytenoids relax to allow the chords to fall apart, their relaxation diminishes at once the antagonism which they exerted against the crico-thyroids, and the latter having less of their force neutralized, are able with less effort to give the requisite tension to the vocal ligaments. This also is a point which, so far as I know, no writer has before explained. I suppose that the smoothness of the tone results from the fact that the separated chords no longer strike each other in their vibrations, and the smoothness of the sensation in the throat is for the same cause.

The head register of the female which is the falsetto of the male, is, as I said before, that flute like tone used by females on the highest notes, but which in male singers is condemned by teachers of music, because in them it is not of sufficient flexibility to repay cultivation. The proof that the falsetto of the male is a true head register is this: First, the quality of the tone is identical; secondly, boys before the age of puberty have a perfect head register like females. As the voice changes at puberty, the chest register is gradually extended downwards, while the head register is contracted in compass but not wholly lost, that which remains of it after the change of the voice being called falsetto.

The method in which the head tone is produced has never been explained. Draper says it is considered to be probably due to harmonic subdivisions of the column of air in the trachea, or to vibrations of the inner edge of the vocal chords. That this is not true, is evident from the fact that in wind instruments it is always the column of air *beyond* the point of sound, which regulates the pitch and not the column on the hither side of it. So of the vibration of the edges of the ligaments.—Their line of tension is parallel to the edge, therefore by the law of such organs, a vibration of the extreme edge alone would merely result in a feebler sound, but not in a higher pitch.

But if we examine more attentively the anatomy of the larynx, we find an arrangement exactly adapted to the production of the head register.

When a violinist wishes to obtain a high note from a string, he "stops" it against the finger board with his finger thereby shortening its vibratory part. Precisely analogous to this, there is an arrangement in the larynx for "stopping" the vocal chords so, as to render them virtually shorter. The anterior processes of the arytenoid cartilages are of considerable length, perhaps one fourth or one third of the entire anterior-posterior diameter of the larynx. Now if these cartilages are not firmly fixed, they will vibrate with the chords, and practically they are then a part of the chords, so that the vibratory organ includes not only the vocal tendon, but the processes of the arytenoids to which they are attached. This is the condition in the chest and medium registers, but in the head register I suppose that the arytenoids are placed in contact so firmly and so fixed by the muscles, that they no longer vibrate as a part of the cords, but by mutual pressure "stop" each other and become fixed points like pegs to which the tendons are fastened. The vibrations therefore are confined to the tendinous part of the chord, thus shortening them about one third, and rasing the pitch of the sound proportionally. Hence the reason why the highest notes can only be produced in the head register. With this shortening, the same amount of tension produces a much higher pitch than when the whole length of the organ vibrates according to well known acoustic laws, or conversely the same note can be given with much less muscular tension, hence the sense of relief which one feels in passing into this register.

So far as I know, no writer has ever before shown that the principle of "stopping" was made use of in the larynx. If so, I may claim to be the first one who has explained the physiology of the three registers of the human voice.—*Peninsular Journal.*

Chicago, Ill., Aug. 1, 1857.

E. ANDREWS.

# EDITORIAL AND MISCELLANEOUS.

## Editorial Responsibility.

WE wish it distinctly understood that the Editors of this Journal are equally responsible for the matter contained in the Editorial Department.

We are induced to make this statement, from the fact that an exchange has recently singled out one of the Editors for a most unjustifiable personal attack.

In addition to this, we wish it as distinctly understood, that we detest controversy, and can only be drawn into it for the defence of what we conceive to be the most sacred rights.— While we have not, perhaps, that remarkable "independence and freedom from jealousies and fears," characteristic of a certain gassy "Falstaff," we yet think that we have some conception of our rights and a somewhat determined purpose to maintain them.

## The Medical Regulator Again.

Dr. Bowling, of the Nashville Journal, has thought proper, a second time, in the exercise of his powers as regulator of American Medical affairs, and especially of the press, to introduce the name of one of the Editors of this Journal in an offensive way, into the columns of *his* Journal, as we believe he calls it. Now, though we have but little to say in reply to the foul emanations which are constantly issuing from that source, that little, must be very decided.

In reference to the last *issue*, we pronounce it *untrue* that we have employed *any* part of our time in abuse of the American Medical Association; so far from it; we are to-day a better friend of that institution than the individual referred to. It is true, that we have, in the exercise of the ordinary privileges of a freeman though fit to express our opposition to the perversion of the Association from its proper and legitimate objects—the advancement of medical science and the promotion of harmony in, and elevation of the profession—to the pursuit of visionary or selfish schemes.

We have been presumptuous enough to attempt to discuss the powers of the American Medical Association in connection with the rights of individual members of the profession and those of State organizations, and instead of an attempt to refute our positions in a courteous and gentlemanly way, we have been met by an insufferable arrogance and insōlence to which we do not feel disposed to submit.

Now, in conclusion, we would remark that we do not know that we have any special interest in maintaining friendly relations with "A Western Editor," but we do feel a special interest in saying to him that we shall continue to despise and denounce *hypocrisy*, even though it present itself under the specious garb of *diplomacy*.

## *The Presidency of the American Medical Association.*

It is evident that the time has arrived when some change in the manner of selecting the presiding officer of our national congress must be made. We have felt for years that some one should speak out upon the subject. We would have spoken a year ago, had not the fact that the meeting of the association, for 1856, was to be held at Detroit, and that the candidate then most prominent and since successful, has been in a position of personal antagonism with an interest which we represent, prevented us. Any attack made by us, at that time, would have been conconstrued as personal, and as having its origin in local prejudices or jealousies; we therefore held our peace, and consented to forego our protest against an evil which must eventually impair the respectability of the association, and turn from it the regard of the best men in the profession.

The next meeting is to be held at Nashville. We have none but friends in that locality, and we believe that they, too, will acquiesce in our plans for reform, or help to suggest another looking to the same end.

The evil to which we allude is self-evident. Custom, not law, has made it the usual course to select the president of the association from the city in which the session is held. Thus the two meetings held at Philadelphia have given us Profs. Chapman and Wood, as presidents; that in St. Louis, Prof. Poe; that in Richmond, Dr. R. B. Wellford, and that in Detroit, Dr. Z. Pitcher. In only one instance has the rule failed to hold good. At the meeting in New York, in 1853, no one worthy of the office was found in that great city, and Dr. Jonathan Knight, of New Haven, was chosen. We hoped then that the precedent thus established in a large city, might be permitted to hold good in the small towns; but it is not so to be. It is evident, that until it is put out of the power of the nominating committee to virtually elect the president, we shall forever be subjected to the rule of that happy individual who happens to be the Nestor of the place of meeting. Grey hairs are honored at the expense of working men. Worse than this. To follow back the chain of promotion, we shall find that the association take the man the nominating committee chose to give them, and the committee take the man they are instructed to by the wire-pullers of the particular locality. In a small town, with some forty to fifty physicians, this matter can usually be cozily arranged among themselves, with more regard to their own interests than to the dignity or the association.

We regard the presidency of the American Medical Association as an honor too high to be lightly bestowed upon any man. The consideration of locality is the last that should be thought of. It is nonsense to make it a mere compliment to a town, in return for a good feed and abundant champagne. The occupant of that high station should be chosen from the profession at large. He who has labored; he who, through many years, has toiled to advance his paofession; he who has built up for himself a name as a discoverer or medical philosopher; and who, perhaps, has found no other reward than a good name for all his efforts, such an one is our candidate.—*Buffalo Med. Journal.*—*Nashville Journal.*

We endorse without hesitation the views of the Buffalo Journal. * * We believe that the nomination of this officer should be taken from the Nominating Committee, and that he should be elected by the Association by ballot. In no other way can the presiding officer be regarded as the representative of the Association. In this way the promotion of a member to this exalted office would be to confer upon him the highest honor in the power of his professional countrymen. This plan would secure the attendance of the most distinguished of our brethren, for the selection would necessarily be made from those present. But when it is understood beforehand that this office is rather the result of the accidental conjunction of the place of meeting and place of residence, the position cannot be ragarded of a distinguished honor. Every physician who loves his profession must be ambitious of the good opinion of the more high-minded and honorable of his brethren, and cannot be indifferent to such honors as they can through their public meetings and associations confer upon him, and to this extent every one may be regarded as feeling more or less personally interested in the presidency of our Association, the very highest position which our suffrage can secure to the worthy among us. The framers of our constitution could not have foreseen the influence of local circumstances in determining the presidency of the Association, but as experience clearly shows that such is the fact, it is apparent that it is now the first great dutyof this body to so amend the constitution as to secure a more just and equitable method of appointing its president. But as the present provisions cannot be repealed at the next meeting, a constitutional provision requiring the resolutions to change the instrument shall lay over to the next meeting, our brethren abroad may very naturally expect in advance some expression of the feelings of the profession in the State upon that point. Those with whom we have discussed this subject here agree that the *habit* of the Association in selecting its presiding officer from the city in which the meeting occurs, is a bad one, and cannot fail to destroy the dignity and honor of the position, and consequently impair the honor, dignity and usefulness of the Association, and that the sooner a bad habit is corrected the better, and do therefore most earnestly hope that the reformation may begin at Nashville at the next meeting of the Association —*Nashville Journal.*

We present above the position of the Nashville Journal in reference to the Presidency of the American Medical Association in October preceding the meeting in Nashville; notwithstanding which, one of the Editors became the President of the body, with the concurrence, (as we have a right to presume from his own statement in the September number of this year,) of the other, who had taken such decided ground against the selection of the President of the Association from the place at which the meeting was held, for which course, as he says, "Dr. Eve also declared."

Now the excuse for this, *apparently* double faced operation is, (according to Dr. Bowlings defence,) "a double game of Dr. Gross," of Philadelphia, who had expressed himself in favor of selecting the Presiding Officer of the Association from some other locality than that occupied by the body, but who was afterwards found "advising and endeavoring with a fair prospect of success to secure the election of a Tennesseean to that office."

A change in the views of Dr. Gross, made the selection of one of the Editors of the Nashville Journal, an indispensable necessity, they being the only men in Tennessee who could be even *thought of* as deserving that position. Comment upon such logic is useless.

Now, we mean for it to be remembered, that in this matter we have said nothing intended to be personally offensive towards Dr. Eve or in any way disrespectful of him—we have not said that *he* had any agency in bringing himself before the nominating committee as a candidate for the office of President of the Association, but we do say that the Editor of the Nashville Journal has placed not only himself but his assistant in a very unenviable attitude in reference to this subject, to which however we could have had no disposition to allude, but for the dictatorial and offensive course of this inflated boaster.

### *Death of Charlotte Brontë.*

The death of Charlotte Brontë is the saddest fact in a life whose key-note was sorrow, and whose melancholy music filled the very atmosphere in which she lived, and moved, and had her being. She may almost be said to have been baptized in the dark waters of death. Her mother died when she was about five years of age, and, in quick succession, four sisters and her only brother.

It was not a common family, that of Charlotte Brontë. Two of her sisters died young, but lived long enough to indicate that they would have left their mark on their times. The two elder sisters gave the same evidence of their power in written works. Her brother had large intellectual endowment and culture, but worse than wasted all that might have greatly distinguished him. We do not design in this notice of one whose life has been so admirably written by Mrs. Gaskill, and which all readers have read, to review this work. And yet it may not be out of place to say that it is a record of a remarkable person, who in the midst and pressure of severe trial, never failed in duty to herself, and to all to whose well-being she could in any way contribute. She was small, delicate in person—apparently incapable of effort. Yet she meets or makes occasion for intellectual, moral and physical action, which in its detail astonishes us by its rarity, and still more by its success. She writes with startling strength—brings before you men and women, her own creations, and reveals what is in them, both in their word or work, in language and act which leaves little ground for question. She goes to a foreign country, of different language from her own —goes alone, by the guidance of the same instinct which always accompanies a true object, and accomplishes all she attempts. She writes, and while her manuscripts are gathering dust on the publisher's shelves, she writes on, nothing daunted, and at length comes forth as an author, and declares, anonymously, her gigantic power. "Who wrote Jane Eyre?" is the question. "Not a man," says one, "for a man would not"— "Not a woman," says another, "for a woman could not."

Pardon us, that we have for a moment deviated from our purpose— to speak of the death of Charlotte Brontë. We could not but say a word of a life so sad as was hers, and for the reason that in an event which was to her an unmixed felicity, she found death. Sadly, in deep sadness, do we ask, was it not a fitting coronation of such a genius, and such a life?

Charlotte Brontë married late in life. Her father opposed her marriage, and the daughter could not marry the man she so deeply loved, as her marriage must separate her from her father, now more than eighty years of age, and with no living creature of his house, but her, left.— At last, her father's consent is given and she is married. This was an event in Haworth. Every body came to the wedding. Charlotte had been the friend of all the poor. She would traverse, in snow and rain, the wild moors of her home, to carry something for the sick child or parent, or to do something for them. Every body knew her, and every loved her. Says Mrs. Gaskill, "many old and humble friends were there, seeing her look like a snow-drop." Her bridal dress, after a few months, became her shroud.

She became pregnant, and soon after experienced the ordinary symptoms of that state, but which rapidly became morbidly severe. Nausea, vomiting and faintness; and fainting, at first frequent, became, at length, constant. The sight of food was sufficient to produce them all in most distressing forms. Said one, "a wren would have starved on what she ate during those last six weeks." A physician was called.— "He came, and assigned a natural cause for her miserable indisposition; a little patience, and all would go right."

From the record, nothing more seems to have been said or done in this case. We copy the following from Mrs. Gaskill, because of its professional interest, and as showing something of the sufferer's state in the last moments of her life.

"Long days and longer nights went by; still the same relentless nausea and faintness, and still borne on in patient trust. About the third week in March, (it was early in the new year, 1855, that the symptoms first appeared,) there was a change; a low, wandering delirium came on; and in it she begged constantly for food, and even for stimulants. She swallowed eagerly now; but it was too late. Wakening, for an instant, from this stupor of intelligence, she saw her husband's woe-worn face, and caught the sound of some murmured words of prayer that God would spare her. 'Oh!' she whispered forth, 'I am not going to die, am I? He will not separate us, we have been so happy.'"

She died Saturday morning, March 31st.

It is of the professional relations of our subject—the treatment of the signs of pregnancy when morbidly aggravated, that we would now speak. Was the *cause*, the *motive cause* of those symptoms which produced death in Charlotte Brontë, removed? This question is of great interest. Nearly half a century ago, it was our privilege to attend the midwifery lectures of Dr. John Haighton, in London; and a better lecturer than Haighton, is not in our memory, He discussed this question of removing the *cause* of those symptoms, and showed conclusively that in cases in which other means had failed, and the worst consequences were to be looked for, it was the duty of the physician to remove the *cause*, viz: *to remove the fœtus from the womb.* Haighton related his experience, and dwelt on the opposition he had met with in consultations, to such measures as he knew could alone save life. More recently we have spoken with eminent men abroad, on this subject, and have met with objections to the practice; or, when it has been allowed to be proper, it has been after so much evil has been done that there has hardly been any reason to look for success from it.

We have felt it our duty to resort to the measure under consideration, and in every case recovery has been rapid and complete. We have known death to happen when the measure has been rejected by patient or friends, and where all other means have been faithfully used. In one case it was clear that death must occur, if things remained as they were, but in which the mother of the patient would not consent to the measure, unless the physicians who advised it would in the first place guarantee its success. The attending physician would not do this; and soon after our consultation we heard of the patient's death.

In another instance, the lady lived in a distant State. She was a clergyman's wife, and of the Church of England. She was reduced by nausea and vomiting to excessive weakness, and absolutely could keep nothing on her stomach. It was between the second and third month of pregnancy. The fœtus was removed, and, in twenty-four hours after, we found her heartily eating solid food, and she was soon well. The operation was performed on the same patient a second time under the same circumstances, and with the same result. Let it be remembered that this practice was not attempted until full trial had been made of the most approved methods of treatment, and after the best evidence that the disease was rapidly increasing. In another lady it was not until convulsive movements had occurred in the universal exhaustion, that the measure was adopted. This patient recovered, and this was a second trial of it in the same patient.

We dwell on these cases, because a grave moral question is involved in our subject; and to say that it is only in those cases in which life is clearly in jeopardy, that any physician who deserves the name, would for a moment entertain the question we are considering. It is then as a *remedy;* and only to be used under what we believe are really desperate circumstances.

Whether the cause was removed in Charlotte Brontë's case, or whether she died of pregnancy, we know not. We know not what was the limit of that "little patience, when all would go right." But as the disease continued unrelieved till death, may it not be asked if the *cause* of that disease did not remain undisturbed till it became the cause of death?—The question is put, because in no like case which has come under our care, however unpromising, has death occurred after the removal of the contents of the womb.

The Rectory at Haworth is now desolate. Its venerable head, in his extreme age, stands erect and alone, literally in the midst of the graves of all his house; and before him, in his church, is the simple tablet on which are recorded the names, the ages and the death, of his wife and of all his children. WALTER CHANNING.

[*Boston Med. & Surg. Journal.*

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*Cold Applications in Pneumonia and Pleurisy.*—Prof. Niemeyer, in his contributions to clinical medicine, expresses his opinion, based upon numerous observations, that in Pneumonia and Pleurisy, cold applications (around the chest and back) are not only unaccompanied by danger, but as efficient here as in inflammation of external organs. They produce great relief, and the patients, even children, ask for their renewal when they have become warm. Dr. N. saw, under this treatment, the exudation cease earlier, the fever extinguished sooner, and the patients returned to their work on the seventh or eighth day, while he never observed metastatis, or the consequence of cold from this treatment. In the latter stages of these diseases Dr. N. gives preparations of iron with great success, on the theory adopted by distinguished pathologists that the blood-corpuscles are materially diminished in these diseases. (I have seen very good effects from the tinct. ferri muriat. in capillary bronchitis and pneumonia accompanying measles.—TRANS.) (*Medic. Nenigk.*)—*Med. & Surg. Reporter.*

*Treatment of the Asphyxia of New-born Children.*—By Dr. Marshall Hall.

"The treatment of the still-born infant may finally be thus briefly resumed in the form of rules:

"1st. Place the fœtus on the face.

"2d. Sprinkle the general surface briskly with cold water.

"3d. Make gentle pressure on the back; remove it, and turn the infant on the side, and again place it prone with pressure.

"4th. Rub the limbs, with gentle pressure, upwards.

"5th. Repeat the sprinkling only now, with cold and hot water, (of the temperatures of 60° and 100° Farhn. alternately.)

"6th. Continue these measures, or renew them, from time to time, even for hours. The embers of life may not be enirely extinct.—*Med. Times & Gazette.*

*The Plantago Major in Spider Bite.*—Dr. D. W. Maull in an article in the *Med. & Surg. Reporter* recommends the Plantago Major as an efficient remedy for the bite of the venomous spider. He says: "We are led to regard it almost in the light of a specific, if such a term is admissible." "The mode of preparing and admidistering is, to express the juice from the fresh leaves, and give three or four fluid ounces at a time."

### SUBSCRIPTIONS RECEIVED.

J. H. Ethridge, Ga., 3d vol.; R. M. Williams, Ga., 3d vol.; Jno. A. Moody, Ga., 3d vol.; G. W. Powell, Ga., 3d vol.; A. A. Davis, Va., 1st and 2d vols.; A. B. Wallace, Ga., 3d vol.; R. J. Bigelow, Fla., 3d vol.; David Kendall, Ga., 2d and 3d vols.; G. W. Burney, Ga., 2d vol.; W. A. Speir, Ga., 3d vol.; W. T. Sanders, Ga., 3d vol.; W. S. Swanson, Ga., 3d vol.; W. P. Anderson, Ga., 3d vol.; G. L. Johnson, Ga., 3d vol.; James T. Bond, Ga., 3d vol.; A. M. Parker, Ga., 3d vol.

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# ORIGINAL COMMUNICATIONS.

## ARTICLE I.

*Remarks upon Ciliary Blepharitis* By W. F. WESTMORELAND, M. D., Prof. of Surgery in the Atlanta Medical College.

Within the past few years, it has been our fortune to witness quite a number of cases of this rebellious affection, in its several stages, and of observing its unsightly, and in some instances, irreparable results. As there is, perhaps, no disease which at first appears so simple in character, that gives the physician so much trouble by its frequent relapses, and unpleasant complications, we have thought it would not be amiss to direct the attention of the profession to it by giving the result of our observation and investigation as to its character and treatment.

By Ciliary Blepharitis we mean that disease of the eye in which the free borders of the lids are, at first, alone inflamed —the sebaceous glands which open in the follicles of the eye lashes, and the glands of Meibomius being first attacked. Some writers make several divisions and sub-divisions of this affection, which rather tend to confuse than otherwise—their divisions having for basis the set of glands first involved in the inflammation, the peculiarity of symptoms as presented in different constitutions, or in the different stages of the disease.

We shall not stop here to discuss the propriety of these divisions, believing, as we do, that if one set of glands are attacked, the other, if the affection progresses, is soon involved, the disease running the same course, and presenting the same symptoms and complications in both. Much confusion, too, has resulted from the multiplicity of names under which it has been described. Beer, who has written a most excellent treatise upon this lesion, remarks that he knows of no disease which presents more confusion in regard to name than the one under consideration. Thus it has been described as *Ophthalmia Tarsi*, *Glandulous Ophthalmia*, *Dry Blepharitis*, *Scrofulous Ophthalmia*, *Blepharite Tarsi*, *Tarsal Inflammation*, *&c.*, *&c.*: each author adopting a name in accordance with his peculiar views as to its character, or which best suited his fancy. To prevent confusion in noting the symptoms and complications consequent upon the extension of the disease, we have thought it best to make three stages, or degrees of intensity.

*First Stage.*—In the most simple form of Ciliary Blepharitis, the sufferings of the patient are very slight; and if the lids be well cleansed, it is with difficulty that the physician can detect any lesion whatever; the only symptoms being small scales attached to the base of the half dozen or more eyelashes, with a stiffness and smarting sensation when the patient has been exposed for any length of time to an artificial light, bleak wind, or such other cause as will tend to irritate the part. These thin scales are the result of a super-secretion of the glands before alluded to, the watery contents of this puriform collection evaporating as soon as it comes in contact with the free surface. One of the peculiarities of this squamiform substance is, that in removing it with a probe we find that it passes over the whole length of the eyelashes. It is not unusual to find them, if great care be not taken to keep them removed, entirely detached from the lid and resting midway between the base and the ends of the eyelashes by which they are pierced. Corresponding with the follicles diseased we usually find a slight tumefaction of the lid, and if the disease has existed some length of time, or if there be much irritation of the parts from accidental causes above suggested, that portion of the lids tumefied becomes more or less red, and in some cases vessels can be traced running from the base towards the free borders of the lids.

The above are the symptoms usually observed in the most simple form of the disease. As the disease progresses all these symptoms are increased. From a mere point upon one of the lids the inflammation extends to the whole free border of the lids, all the glands and hair follicles being involved in the inflammation. The patient now suffers greatly from the least exposure to causes that will tend to irritate the part; the lids are tumefied and red, and it is not unusual to find small ulcers along the free borders. The eyelashes from the very commencement of the disease, fall out, but, at first, are reproduced; the little ulcers above alluded to, usually occupying two or three hair follicles. The ulcers are seldom perceptible until the secretions are removed, and the parts thoroughly cleansed.

We have thus been particular in describing the first stage or degree of intensity, as it is in this stage that the disease most readily yields to treatment.

*Second Stage.*—It is in the second stage that the physician is most frequently consulted, and then not so much for the original disease, as for accidents and complications consequent upon its extension. In this stage, it is not confined to the free border of the eye-lids, but extends to the conjunctiva, first to that portion of the membrane forming the internal layer of the lids, and next to that reflected upon the ball; not unfrequently, as will be seen hereafter, the cornea becomes involved in the inflammation. As soon as the mucous membrane becomes inflamed, the secretions are changed in character, and are much more profuse—presenting the same appearance, so far as this feature is concerned, as is usually observed in Catarrhal Ophthalmia. The ulcers, before alluded to, on the borders of the lids, are more numerous, larger and deeper; the tumefaction of the lids is increased; and if the secretion be profuse it is not unusual to see slight abrasions or ulcers upon the lids. If the mucous membrane lining the lids be slightly tumefied at the same time that these ulcers exist, there will be a slight deviation of the lids—a disposition to ectropion, which, if the disease continue uninterrupted, will result in a complete eversion of one or both lids. Another accident, common to this stage, which is annoying, both to physician and patient, is a deviation of the puncta lachrymalia, the tears which are copious from the irritation about the eye, mixed with the other secretions, pass over the cheek, and sometimes excoriate it to such an extent that it is one of the greatost sources of suffering to the patient. This deviation of the puncta often takes place before there is any perceptible deviation of the lids. The inflammation, in some cases, extends to the lachrymal canals, even in the commencement of this stage, and often, notwithstanding the arrest of the original affection, continues until a lachrymal, tumour, or fistula is the result. Scarpa contends that this is one of the most frequent sources of lachrymal fistula. Whether this complication is the result of an extension of the inflammation to the canals and sac by continuity of surface; or, whether, as Scarpa supposed, it is the result of the passage of the tears mixed with the purulent secretions through this their natural channel, we will not stop here to discuss. Suffice it to say, that it is a frequent and very troublesome accident. Frequent crops of styes, which we neglected to mention as a symptom of the most simple form of the disease, are also common to this stage. It is in patients with a Scrofulous diathesis that this little accident is most frequently observed.

As above suggested, it is in this stage that the physician is most frequently consulted, not so much, however, for the original disease as the accidents, which are the principal source of their suffering. The physician, too, often commits the grave error of prescribing for the complications which most annoy the patient, without any regard whatever, to the original affection; the consequences being, that the immediate sufferings of the patient are relieved, to return again in a few weeks, or months, with more intensity.

In the third stage, all the symptoms enumerated are greatly aggravated; the eyelashes are all destroyed, or if there reremains a few, they are irregular and unhealthy. The ulcers upon the borders of the lids are much larger and more numerous; in some cases, the whole of the free borders of the lids are ulcerated, and so extensive at some points, that the tarsal cartilages are, to a great extent, destroyed. In some cases, there are extensive and repeated abcesses of the lids, if upon the outside, ectropion is the invariable result; if, however, the abcess bursts upon the mucous surface—the inside of the lid—Trichiasis, with all its unpleasant consequences, is the result. In more than one case, we have witnessed a destruction of the cornea, with a total loss of vision, from an inflammation of the conjunctiva and cornea, induced by this unpleasant deformity. In the absence of any abrasion or ulceration, there are cases in which we see, both in the second and third degrees of intensity, a contraction of the skin under the inferior lid, inducing a kind of ectropion, which, without a careful examination, would appear to be the result of an inflammation and thickening of the mucous membrane lining the lids. From this mistake patients are sometimes forced to submit to the pain of an excision or cauterization of the thickened mucous membrane, without any favorable result, when the deformity is readily corrected, by the application of unguents, or such other remedies as will protect the skin from the irritating effect of the tears and purulent secretions which pass over it, and which, alone, induces this deviation of the lid.

There are other accidents, of which we would like to speak, but if we were to attempt to give, in detail, all the unpleasant complications that may result from this, at first very simple lesion, we would extend this article far beyond the limits first intended.

The course of the disease, particularly in the first stage, is decidedly chronic, the most simple form existing, even without treatment, for months, and even years. The second and third degrees, however, are more acute in character, accidents or complications arising in both, which, if not met with appropriate remedies, will result in a destruction of the eye, or in some unpleasant deformity.

*Treatment.*—As the first great indication in the treatment of this, as in all other diseases, is to remove the cause, it is important, before speaking of the remedies most applicable, to notice, to some extent, at least, some of the sources of the disease. The Scrofulous diathesis is one of the most prominent predisposing causes; so frequent is it that some writers contend that it is alone in this class of subjects that we see the disease—consequently the name *Scrofulous Ophthalmia.* We are, however, convinced from our own experience, as well as the experience of those high in authority, that there are quite a number of cases in which we cannot detect the least taint of this unfortunate diathesis. The want of a sufficiency of digestible food, impure atmosphere, intemperance, &c., are said to be predisposing causes of this disease. The exciting causes are numerous, and are usually such as tend to irritate and congest the eye. Several of the professions are exciting causes, thus the stone-dresser, baker, plasterer, practical chemist, &c., are frequent subjects of this affection. Exposure to artifical light, for a length of time, as reading at night, or, as in some of the professions, as the jeweler, is a frequent exciting cause of the disease.

The first indication, then, in whatever stage we may be called to treat the affection, is, to remove the exciting cause. This is not, however, so readily accomplished as we would at first imagine, particularly in the first stage, as in this the most simple form, it is difficult to induce the patient to give up for the time, his occupation for what he considers such an unimportant affection. If our patient is of lymphatic temperament and disposed to Scrofula, such remedies as are applicable in this peculiar affection must be used; if there be other predisposing causes, as above suggested, such a hygeinic course as will tend to change this constitutional defect must be adopted.

If we are called to treat the disease in its first stage, our local treatment will, at first, consist of such applications as will remove the scales found at the base of the eyelashes, and, at the same time, allay the irritability of the part inflamed. We have no application that acts so happily as a small poultice made of well cooked rice, moistened with fresh milk. If this cannot be readily procured, we may substitute a poultice made of ground flax seed. It is seldom that we can induce the patient to apply the poultice during the day; if they are applied at night they should be renewed once or twice, during the night. The poultice softens the secretion so that the scales may be readily removed with a hair-pin, probe, or in some cases with tepid water and a fine linen cloth. It is of the very greatest importance that the scales be removed, as they are a source of great irritation, and at the same time, effectually prevent any remedial agent coming in contact with the diseased surface. After we have, in this way, thoroughly cleansed the part, we will be able to determine the extent of the lesion; if there be small ulcers, which we sometimes find even in the commencement of the disease, they should be touched lightly with a stick of the nitrate of silver; or, if there be no ulcers, the border of the lid may be touched by means of a small camel's hair brush, with a solution of nitrate of silver—twenty grains to the ounce. Numerous ointments have been proposed here, as the red precipitate of various strengths, ointments made of the nitrate of silver, white oxide of lead, &c., &c. The application of the stick of the sulphate of copper has, also, been suggested and practised with some success. But whatever agent we may select, it is of the very greatest importance that the secretions be removed, and the diseased surface thoroughly cleansed, before their application. The poultices should be renewed from time to time, as circumstances may demand. The patient should be impressed with the importance of removing the secretions as soon as they make their appearance. In impressing this feature of the treatment upon his class, I often heard M. Desmarres remark, during the past winter, that he never had much difficulty in arresting this affection in young ladies who were disposed to be coquettish, as they, for appearance sake, if nothing more, would remove the secretions as fast as they would form. He contends that he has often arrested the disease by removing the cause, the application of the poultice, and great care in removing the secretions as soon as formed. If we use the stick or the solution of the nitrate of silver, it is best to apply a little simple cerate or olive oil to the borders of the lid, thus keeping them soft—preventing that hardening which so often results in cracks and excoriations. Astringent eye-washes are worse than useless, in this form of the disease. In the second stage, the treatment, so far as regards the original affection, differs but little, if any, from that just described. If the conjunctiva is inflamed, slight astringent washes, with soothing applications, in addition to that suggested for the more simple form, is all that will be necessary.

If there be excoriations and ulcers upon the lids, from the contact of the secretions, the part must be protected, which may be effectually done by covering the ulcers or excoriations with simple cerate, or some soothing ointment. This precaution will often prevent a deviation of the puncta lachrymalia; and, in other cases, will relieve that disposition to ectropion which we described as one of the accidents of the second and third degrees. Cleanliness, if you will allow the expression, is more important in this stage than in the first.

In the third, the ulcers, as before said, are much larger, deeper, and more numerous than in the other two degrees; the application of the stick of the nitrate of silver, after the ulcers have been well cleansed, is the most effectual way to arrest their progress. To reach the bottom of the ulcers, which is important, it is necessary to trim the stick to a point. The cauterization of their edges, would do but little towards removing the disease. Poultices in this stage are, at first, of the very greatest importance, as there is always much irritation about the eye. Trichiasis, ectropion, lachrymal fistula, &c., usually require an operation for their relief.

## ARTICLE II.

### *Morbid Effects of Diseased Teeth upon the General System.* By F. D. Thurman, Dentist, Atlanta, Ga.

As the teeth and their delicately constructed membranes are so directly connected by nerves and blood-vessels with the general system, it is not surprising that so many sympathetic affections should originate from this source, particularly when we take into consideration the fact, that the teeth are situated so near the brain, the locality of so many important nervous centers; and, also, the fact, that the periosteal tissue which surrounds the roots of the teeth (and is so often diseased) is but a reflection of the mucous membrane which lines the stomach, bowels, lungs, and whole internal viscera. But, notwithstanding the fact, that diseases of the head, throat, stomach, lungs, &c., so often originate with diseased teeth, it is only within the last few years that physicians are beginning to call the attention of the profession to the importance of the morbid relation existing between the teeth and other parts of the system; and even now, its importance is comparatively overlooked. They very often ascribe the cause of acute disease in children to the irritation produced by the eruption, or cutting of the temporary teeth; but whilst they seem well convinced that sound teeth pressing upon sound gum will produce acute diseases in children, they seem to overlook, in a measure, the important fact, that diseased teeth, with their inflamed membrane and vitiated secretions, may, upon a less irritable nervous system, produce chronic diseases of a most serious nature.

If we were not a degenerate race of people, and the constitution and health of mother and child were always perfect, we would never hear of such a thing as painful dentition; but, like the inferior animals, our teeth would frequently be ready for use before their presence had been observed. But, as it is otherwise, we must bear the penalty of violated laws of nature.

If the constitution and health of the child is perfect, nature is always ready and able to prepare the way for the growing tooth in a natural and painless manner. But children are seldom born with perfect constitutions, and those who approach nearest to it are generally rendered feeble by the inability of their delicate stomachs to digest the quality or quantity of milk it gets from an unhealthy or innocently imprudent mother, to say nothing of the *good things* it soon learns to cram, which gratify the palate and ruin the stomach.

A diseased or painful dentition generally shows itself by a swollen, inflamed and very sensitive condition of the gums, more or less fever and irritation of the bowels, flow of saliva, pressure of blood to the head, thirst, &c. These symptoms generally attend all of the milder forms of painful dentition. In the worst forms all of these symptoms are aggravated; the child starts and screams in its sleep, stupor and convulsions set in, and death often relieves the little sufferer.

### *Treatment.*

Very frequently the child may be suddenly and effectually relieved by very carefully and perfectly separating the gums and membranes, and freeing the rising tooth. If the operation is not thoroughly performed it is worse than useless, as it only adds to the little patient's suffering without affording any relief. The state of the bowels should be very strictly attended to, and remedies administered according to the symptoms presented—such as mild purgatives, alkalies, cold and warm bathing, fresh air, &c., &c.

The eruption of the second set, or permanent teeth, is seldom attended with much pain or inconvenience, with the exception of the Dentes Sapientiæ, or wisdom teeth, which often produce a great deal of trouble, such as a high state of inflammation of the gums, which frequently extends to the throat and tracheo, and occasionally involving the lungs; fever, acute pain in the gums, headache, inflammation of the eyes, &c., &c.

In a large majority of cases relief may be obtained by freely separating the gums down to the tooth; but we sometimes find the tooth so crowded between the ramus or angle of the jaw and the second molar, that extraction is the only means of relief.

Diseases consequent upon decaying and diseased teeth are very numerous, though I shall not detail them, but simply mention a few general facts. Any one who has suffered much with the toothache, and felt its sudden and debilitating flashes throughout the nervous system, even to the extremity of the fingers, must feel convinced, (if he thinks at all,) that long continued diseases of the teeth and their membranes would produce like diseases of other parts, and in addition to their direct nervous sympathy we know that the food cannot be properly masticated upon diseased and partially decomposed teeth, and consequently it must pass into the stomach in a crude and unprepared state, taxing this organ with a double duty, a duty which nature never intended it to perform, and which will most assuredly tend to enfeeble the energies of the digestive powers, and as soon as the stomach loses its ability to digest the food properly, the whole man, both body and mind, becomes deranged and nervous, and other affections in various forms, real and imaginary, are the consequences.—The stomach is not only taxed with the double duty of mastication and digestion, but it is poisoned by the decomposed substance of the teeth, decayed animal and vegetable matter mixed with pus and vitiated secretions, which the food unavoidably collects in passing through the mouth. Now it is plain to be seen that we have a sufficient cause for dyspepsia in its worst form, and if we follow the consequences a little further, we see that the stomach, one of the main wheels in the human machine, is thrown out of gear: the whole machine must suffer. This undigested mass must produce more or less irritation of the whole intestinal canal. And now take a glance at the myriads of open mouths of the absorbent vessels, and observe, that, regardless of the propensity of this beautiful network system to choose between good and evil, it is forced (for want of a digestive power) to take up and conduct to the blood a portion of this extraneous compound.—The blood, in turn, is rendered impure and unfit for replenishing the decaying system with new and healthy flesh and bone.

Patent blood purifyers are now sought with avidity, which, if they were valuable at all, could only remove the effect for a time, whilst the cause is still operating. Eminent physicians are consulted, and with all of their profound learning and masterly skill, their penetrating glance seldom detects the impurities. They examine your cellars and other outhouses in search of decomposing substance and poisonous effluvium, whilst the large cavities in the molar teeth contain in the very worst form just what they are searching for. Now add to this the prostration of nervous influence consequent upon the severe pain connected with diseased teeth, and I think we have cause sufficient for many of the ills to which we are heir.—And I wish just here to notice again another very important consideration connected with the influence of diseased teeth upon the system, and that is the fact of this cause being so long continued. The hardest marble cannot withstand the continual dropping from the gentle brook. So with the human system. By its reacting and healing power it is able to withstand very severe shocks, which are short in duration, whilst causes which seem scarcely worthy of notice may, by their long continued action, bring about alarming results.

I might go on to describe many cases of sympathetic diseases of this kind that have come under my special notice, but as lengthy pieces are seldom read, I will close by simply advising physicians, particularly the young, to pay more attention to the state of their patients' mouths and teeth. When you look into your patient's mouth and detect with such unerring precision the slightest departure from a healthy standard in the mucous membrane of the tongue, don't forget that the teeth (notwithstanding they may be partially decomposed and surrounded by inflammation, suppuration and decaying substances,) are a part of the same organization.

# SELECTIONS.

*The Rights of Authors.* By MARTYN PAINE, A. M., M. D., Prof. of General Therapeutics and Mat. Med. in the University of New York.

[The Editors of the *Medical Independent* will much oblige Dr. Paine by inserting in the journal the following extract from an *Appendix* to his "*Institutes of Medicine,*" which is now in the press.]

Upon all questions of priority that concern the advancement of Science and Art, there is, doubtless, a general understanding that the principle should not only be sacredly observed, but that, whenever violated, there should be a common effort to repair the injury. This is alike due to the individual, to the principle, and to the common good. Nor is it less the privilege of the individual, who may have good reason to think that the principle has not been extended to himself, to vindicate his rights, and to appeal to that sympathy which forms the bond of union among honorable men. It is a common cause, and not seldom demands protection.

The author of these Institutes (and it will soon appear that he acted wisely) has sometimes thought it expedient to assert his claim of originality, in advance, to many doctrines promulgated in the word; as, for example, all that is most essential in the application of the nervous power, or reflex action of the nervous system to pathology, and therapeutics, and so much of what is most important in the natural state of the function. This may be readily seen by consulting p. 106, § 222 *b*, p. 107–116, § 225–234, p. 295, § 476 *a*. p. 318, § 493 *d*, p. 321, § 496–497, p. 323–340, § 500–514, p. 465–467, § 714–719, p. 506, § 803–804, p. 515–516, § 819 *b*, p. 661–663, § 894–896, p. 666–676, § 902 *b*–904, p. 679–680 § 905, *a*, p. 690–691, § 906 *g*, p. 693–695, § 917–923, p. 698, § 931–935, p. 703–711, § 940–952, p. 746, § 990 1-2 *b*, etc., where all the subjects relate to the reflex action of the nervous system, and present the nervous power as an important vital agent in the various processes of organic and animal life, in the production of disease, in the operation of remedies, in all the results of bloodletting, in the changes which take place in the secreted and excreted products—having also originally set forth the agency of the nervous power in voluntary motion Index I., Article, *Will*), and as this power is the efficient cause of the modifications of organic results under the influence of mental emotions (Index) I., Article, *Mental Emotions*, and references at p. 867, § 1067).

Indeed, as the reader will have seen the foregoing doctrines relative to the reflex action of the nervous power, operating as a vital *stimulus*, or vital *depressant*, or vital *alterative*, as it may be modified in its nature by one cause or another (§ 107–109, 227–230, p, 661–662, § 894 *b*), pervade this work. The same doctrines are at the foundation of the author's "*Medical and Physiological Commentaries*," published in 1840, while the present work was published in 1847. In the mean time he has also labored to inculcate them thoughout his course of medical lectures in the University of New York—first on the institutes of medicine and materia medica from the year 1841 to 1850, and subsequently, to the present time (1857), on general therapeutics and materia medica.

It may be worth saying also, that the author preserves the term "sympathy," though always meaning by it, as he strictly defines, reflex action of the nervous system, and this whether he employs the term "remote sympathy" or "contiguous sympathy." The elements of sympathy, as set forth in the work, are the *nervous power* and *sensibility*. All this will be readily seen by reference to Index I. Also among other general remarks of a similar import, the author has the following:

" Notwithstandding all the laws of sympathy that are necessary to the full interpretation of the remote effects of morbific and remedial agents are as well established as any laws in physics, *they have not been applied to these important objects;* but on the contrary, those philosophers who have contributed most to their critical exposition, *overlook their pathological and therapeutical bearings, and cling to the doctrines of humoralism and of the operation of remedies by absorption; nor have they applied, in the least, the nervous power in a philosophical manner to an explanation of the natural phenomena of sympathy* (p.111, § 234 a).

When the foregoiong works were first published, it was in the midst of a universal prevalence of the chemical and physical doctrines of life and disease, and the author stood alone in the field of vital physiology, and in the application of the reflex action of the nervous system in resolving the problems in physiology, and therapeutics. A few, however, had the quick sagacity to see its importance as presented by the author; and since the decline of organic chemistry began, others have entered upon the inquiry and the most zealous have promulgated as original with themselves many of the doctrines which belong to the author of these Institutes, especially such as are relative to the nervous system. But the author has relied upon his prfessional brethren for ultimate justice: "*Ultimum et muicum remedium.*" *Jus aliquando dormitur, moritur nunquam.*"

But the author has lately seen so great an indisposition, in certain quarters, to allow him any credit for his labors, that he has concluded to make this expostulation, which refers, particularly, to the following dispute about the authorship of matters in which neither of the gentlemen has any interest, but the writer alone of these Institutes. This rival claim appears in an article published by J. ADAMS ALLEN, A. M., M. D., in the "*Medical Independent*" for September, 1857, p. 381, Detroit, Michigan. Thus:

"It appears from a late number of the *London Lancet* that M. Hall, (Marshall Hall) recognizes, to a certain extent, the priority of Dr. Campbell. His words are these:

"I arrive at this conclusion: the idea and the designation of an excito-*secretory* action belongs to Dr. Campbell, and his details are limited to pathology and observation. The elaborate experimental demonstration of reflex excito-secretory action is the result of the labors of M. Claude Bernard. My own claim is of a very different character, and I renounce every other. It consists in the vast *generalization* of excito-secretory action throughout the system. I trust Dr. Campbell will be satisfied with my adjudication. There is in the excito-secretory function as applied to pathology, an ample field of inquiry for his life's career, and it is indisputably—HIS OWN. He first detected it, gave it its designation, and saw its vast importance."

Dr. ALLEN then continues:

"M. Hall thus far freely and fully admits the priority of Dr. Campbell, and the latter gentleman bases his claim upon the date, May, 1850. I shall undertake to show that this same doctrine was FIRST publicly announced and illustrated in my lectures at the Indiana Medical College, in November, 1848, and thenceforth continuously during the continuance of my public teaching before the several classes of the University of Michigan until my connection with that Institution 'expired by limitation' in 1854. My own manuscript containing this doctrine was written in May or June, 1848,"—that is to say, *more than one year after the publication of these Institutes.*

"What I do claim *is the great generalization that the excito-influence is followed by a reflex change in which the effect is* NOT A MOTION *but* A MODIFICATION OF VASCULAR AND NUTRIENT ACTION. *That this effect takes place* BY MEANS OF THE DOUBLE NERVOUS ARC. A vast number of therapeutic phenomena are thus explained." [As the reader will find, very extensively, in many chapters of this work, particularly in those upon REMEDIAL ACTION, THERAPEUTICS, COUNTER-IRRITATION, CATHARTICS, ETC.—Dr. A.'s capitals and italics.]

Now the whole of the foregoing doctrine is impressed upon the *Medical and Physiological Commentaries*, and has been always taught extensively in the author's lectures since 1841.

Dr. Allen claims, also, the application of the principle to therapeutics, and remarks that "in my course upon 'general therapeutics' the subject of counter-irritation' came under review," and concludes that "the impression MUST BE transmitted to the nervous centres, and thence reflected to the affected organ. In other words, the influence is primarily exerted upon the cerebro-spinal system, and secondarily upon the internal affected organ. This is the gist of the whole matter, and the point consists in the recognition of reflex cerebro-spinal action, which, in the instances adduced, give rise to a *molecular* or *integral* change in the inflamed tissue, and not a muscular contraction. The oral elaboration o this principle was suggested by an idea (?) which does not even now appear to have occurred to either M. Hall or Dr. Campbell, viz: The motor effect is merely *secondary*, and not a necessary part of the action of the nervous arc."

Here, also, the whole of the foregoing doctrine appears throughout those institutes. But they embrace a long chapter, particularly upon "*counter-irritation*," in which it will be seen that the author has employed nearly the foregoing language of Dr. Allen, especially at pages 646, 647, § 893 *e*, and with great elaboration and extensive application of the doctrine throughout the work; which had been also antecedently taught in his lectures for seven consecutive years before Dr. Allen promulgated the same views.

To show still farther this partiality for the Author's writings, or his lectures (then familiar to his large classes of students,) he will quote from Dr. Allen the following conclusions, which he also places in capitals:

"THE EFFECT IS MOTORY, IF CONTRACTILE FIBRE BE PRESENT.

"THE EFFECT IS SECRETORY, IF SECRETORY ORGANS BE SUPPLIED.

"THE EFFECT IS SENSATION, IF SENSITIVE NEURINE BE REACHED.

"THE EFFECT IS PERCEPTION, OR INTELFECTION, IF THE ORGAN THEREOF BE IN CONNECTION WITH THE REFLEX NERVE."

"The effect produced, then, depends upon the *structure and condition* of the organ reached."

"This influence is *not* confined to mere increase of action, as the term EXCITOR might perhaps suggest. The reverse may take place—the excitor may rather become the *depressor*. It would be as correct to say the excitor-*idem*."

Now, the author of these Institutes not only dwells emphatically upon the *depressing* and *sedative* influence of reflex nervous action, according to the nature of the remote causes and special conditions of disease (p. 107–111, § 226–233 3-4, p. 507, § 806, p. 661–662, § 894–895, p. 671–672, § 904 *a*, p. 735, § 978, and *references* in § 1067 *a*, *b*, as to *mental emotions*, and in many other places,) and upon its operation according to the natural structure and special vital constitution of organs, and their varying conditions (p. 59, § 129 *g–i*, p. 61–69, § 132–156, p. 73, § 163, p. 109, § 229, p. 111, § 233 3–4, p. 285, § 555 *d–f*, p. 313, § 487 *h*, p. 353–361, § 525–529, p. 374–383, § 576–584, p. 415–417, § 649, p. 418, § 651 *b*, p. 421–423, § 657–658, p. 522, § 827 *c*, p. 542, § 854 *bb*, p. 613, § 892 1-2 *b*, p. 644–650, § 893 *c–i*, p. 665–672, § 902–903 *b*, p. 746, § 990 1-2 *b*, and the numerous references in those sections;) but the Author represents, also, the reflex action as variously *alterative* in organic life, and this imputed attribute pervades the author's writings. He enforces, everywhere, the doctrine that the reflex action of the nervous power is the modifying cause through which all the changes are effected by morbific and remedial agents in parts that are not immediately connected with the direct seat of their action; and, farther, that the principle is precisely the same when the nervous power is brought into operation by *direct* influences upon the nervous centres (as in the case of their diseases, or when the passions operate, or as the will determines voluntary motion,) as it is when it is brought into operation in that indirect manner known as reflex action.

Indeed, every one of the foregoing doctrines, in all their particularities, as quoted from the American claimant, are taught, at great extent, in the volume before us, as may be readily seen by consulting the references made in this protest, and more extensively, Index I., Articles STRUCTURE, NERVOUS POWER, SENSATION, SENSIBILITY, SYMPATHY, ORGANIC FUNCTIONS, REMEDIAL ACTION, MIND, MENTAL EMOTIONS, WILL. "*Si quæris monumentum, circumspice.*" It may appear superfluous, however, to have made these specific references in an article connected with the work itself; but it is done to encourage those readers who might not otherwise be inclined to ascertain the facts.

But the writer is more interested with the European claimants, of whom he has felt that he has much more reason to complain.

> "Omne animi vitium tanto conspectus in se
> Crimen habet, quanto major, qui pecat, habetur."—JUVENAL.

That the author's physiological and medical writings were generally known in Europe many years before the period at which "Dr. Campbell bases his claim" (1850,) is evident from the distinguished honors to which they had led in that country before that period—that from the Medical Society of Prussia as early as 1842—that from the Medical Society of Leipsic in 1843; and the "Medical and Physiological Commentaries" (of 1840) were published simultaneously in London and New York; and as to the United States, the *Commentaries* were early distributed throughout the land, and his *Institutes of Medicine* more than a year, also, before Dr. A.'s lectures were delivered; and the Author's lectures at the University, which form the groundwork of his Institutes, had been listened to annually by medical students from all quarters of the Union since the year 1841. In 1848 the Author applied the doctrine of reflex nervous action to a physiological demonstration of the substantiative existence of the soul and instinctive principle, which was then published in pamphlet form, and in 1849 the work was extended and assumed the shape of a book, and is now incorporated, in its essential parts, in these Institutes.

Nor, is this all; for the whole of this doctrine of reflex nervous action, and of the operation of the nervous power as an *alterative*, an excitant of the secretions and of vascular action (both direct and reflex,) a depressant and sedative (according to the nature of exciting causes,) and the great immediate cause of diseases and their cure—variously modifying organic actions—was set forth extensively and circumstantially in an "Essay on the MODUS OPERANDI OF REMEDIES" in 1842, of which the Author distributed, at that time, a large number of copies in London, and addressed four thousand copies to physicians throughout the United States. The Author not only sent a copy of the work to Dr. Hall, but dedicated it to him (along with Prof. J. Muller and Dr. A. P. W. Philip,) in connection with an "Essay on the Philosophy of Vitality;" and he may add that he controverted, in the former essay, doctrines of Dr. Hall (in "Memoir on Diseases and Derangements of the Nervous System, 1841" which were in direct opposition to those which are now in question (also, p. 296–297, § 476 1-2 *b.*) These Essays were subsequently bound up in the third volume of the "Medical and Physiological Commentaries," where the former may be readily consulted. But Dr. Philip had fully deduced from his experiments the sedative as well as exciting influence of the nervous system upon vascular action before Dr. Hall's experiments were made (§ 492.)

As to M. Bernard, his experiments bearing upon the connection of the nerves with the functions of secretion, however much they may have been varied and multiplied, were anticipated long before by A. W. P. Philip, which are quoted extensively in these Institutes (p. 290–321,) and towards which Dr. Hall had no friendly disposition (p. 306–308, and where the writer has controverted his views.) The merit of originality which belongs to the present writer, in relation to these experiments, consists in their extensive application in illustrating the functions of the nervous power as a vital agent, profoundly interested not only as an "excito-secretory" power, and a modifying cause of all secreted products, nutrition, etc, when diverted from their natural standard, but in deducing from them a universal agency of the reflex action of the nervous system, though "the double nervous arc," in the production and cure of disease, and by which he labored to explode the chemical and physical doctrines as early as 1840. But, that the writer may not be misapprehended, he will say that he endeavored to establish the fact that secretion in animals, as in plants, is conducted by powers implanted in every part, but that it is constantly influenced physiologically, pathologically, and therapeutically, by reflex action of the nervous system.

The writer is very sensible that unaccountable coincidences often present themselves in the development of new thoughts, and in the discovery of hidden things, especially where enduring reputation may be won '*Ubi, mel, ibi, apes.*"—"*Uno tiene la fama, y otro carda lana.*" But the reader, with these Institutes before him, will quickly find that much that is claimed by Dr. Hall, and all that he has granted to Dr. Campbell, in the foregoing quotation, and, therefore, all that Dr. Allen appropriates to himself,* abounds in this volume, and, in fact, constitutes the life and soul ("zoe kai psuche") of the work, as it does, also, of the "Commentaries," and of the Essay on the "Modus Operandi of Remedies;" nor can the reader fail of the conclusion that, were Dr. Hall's "adjudication," and Dr. Allen's after-thought, founded in any justice, and were not the claimants themselves the obnoxious parties, the present writer would have been long ago convicted by them and by others of arrogant assurance and the grossest plagiarisms. Nevertheless, the Author is most happy to find that his solitary position is becoming relieved, and that a practical direction has been given to his labors by others which cannot fail of carrying forward the great doctrines at which he has toiled, and against manifold obstacles, during his professional life.—*Med. Indep.*

NEW YORK, Sept., 1857.

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* "Unus utrique
Error; sed variis illudit partibus."—HORACE.

## *On the Pathology of Leucorrhœa, as it exists at the present day.* By WM. C. ROBERTS, M. D., Fellow of the College of Physicians and Surgeons, New York, etc., etc.

Fifty years ago the question was insultingly asked by the *Quarterly Review*, "Who reads an American book?" The query has since then been so repeatedly answered, and the contributions of our countrymen in all departments of literature and science have in the past century been so abundant, that it would hardly seem possible that our literary existence could be so completely ignored as we find it to be when consulting English authorities on suujects connected with medical science. It appears that, when writing, our brethren over the water, while carefully acknowledging everything derived from the French or the German schools, obstinately—whether from ignorance, or prejudice and a determination to be unjust—shut their eyes to, and exclude from their pages, everything which is referable to the subject they are treating from the pen of an American. Hence, we find them constantly announcing as discoveries and achievements in medicine and surgery, what had long before originated among ourselves. In reference to no subject is this more true than with regard to leucorrhœa, on the present state of the pathology of which I design to say a few words. The subject, in a practical point of view, is very interesting. It is very frequent, a source of much complaint and inconvenience, and very amenable to treatment and to cure.

The leading authorities in England, on the subject at this day, are Drs. J. H. Bennet and W. Tyler Smith.

The former tells us that at the time of his commencing his investigations into the nature, causes, and therapeutics of ulceration and induration of the neck of the uterus, in the Paris hospitals, the most esteemed French works were insufficient, and the English nearly completely barren on the subject.

In the preface to the 2d edition (1846,) he tells us that the results he has arrived at are so diametrically opposed to the opinions current in the professions, as reproduced by the most recent and classic writers, that they must appear startling even to those posted up in continental researches. The reader, from this, will be doubtless prepared for some extraordinary revelation in this 2nd edition of Dr. B.'s treatise on the subject of leucorrhœal pathology, of which his country may well be proud. His writings produced, he tells us, a marked change in the opinions of a large portion of the profession. Others, among them Montgomery and Kennedy, have advocated and expressed similar views, although we do not find in the paper of the latter (Dub. *Jour.*, 1847,) any acknowledgment of so great indebtedness.

Now, let us try to gleam from Dr. Bennet's voluminous and many-cased treatise, what are *his* views of the pathology of leucorrhœa, and see how far they differ from what had been known and published anteriorly to his time; and in what consists their extraordinary originality, their startling novelty, on which this astounding revulsion in public sentiment depends.

1. *A synopsis of Dr. Bennet's views on the pathology of leucorrhæa.*—Inflammation of the uterus is a very frequent disease (the commonest,) unsuspected, overlooked, and the cause of many morbid states. Diseased conditions of the neck of the womb were known to Hippocrates, and clearly to P. Egineta, who used a *dioptra* for their investigation. This knowledge was resuscitated by Recamier's discovery of the speculum; at once adopted by Lisfranc, who much contributed to establish uterine pathology on a sound, practical basis.

Mr. B. observes that, in Clarke, the standard authority, inflammatory ulceration of the cervix uteri is not mentioned. He tells us, very properly, that inflammation of the body of the unimpregnated uterus, is a rare disease; that of the *neck*, exceedingly common, being in reality the cause, in nineteen out of twenty cases, when confirmed, of leucorrhœa, dysmenorrhœa, menorrhagia, irritable uterus, prolapsus, etc. "Leucorrhœa, more especially when chronic, is nearly always the result of inflammation and ulceration of the neck of the uterus." Dr. B. again takes occasion to repeat, that the doctrine he brings forward—that inflammation of the uterus and uterine neck with ulceration are, in the majority of cases, the real causes of morbid uterine changes and symptoms—may appear strange to him who bases his pathological opinions on the treatises of the day.

2. *Pathological state of the neck of the uterus in leucorrhæa, (inflammation and ulceration* )—These consist in soft tumefaction and enlargement; progressively induration, descent, positive retroversion, a vivid red tinge, uniform or dotted with florid papulæ, or white pustules. On the inflamed surface, a certain quantity of muco-pus, which must not be confounded with the abundant, white, creamy secretion which is frequently found in this region, the result simply of congestion.

Again, there are pseudo-membranous patches upon the cervix. Internally, the cavity of the cervix expands, and the lips of the os are everted and patent (diagnostic :) the mucous membrane dark, livid red, easily bleeding, secreting muco-pus not easily wiped away, or glairy, transparent mucous, like uncooked white of eggs, secreted by the mucous follicles, from the cavity of the cervix, and "nearly always a concomitant of of inflammation."(?) It constitutes one of the principal forms of the discharge commonly called "whites."

Inflammation may exist without, or co-exist with ulceration, the latter most commonly beginning around the os and within it, and extending more or less outward over the neck. The simplest and commonest form is that of abrasion or excoriation only; cervix vivid red, with minute granules, easily detected by lunar caustic. The author defends the propriety of calling this state an abrasion or ulceration, rather than a granular inflammation. In other cases, granulations may be large, livid, fungous, and bleeding; with livid hue of neck and varicosity (*ulcére variqueux* of Fr.) There may be one ulceration, or several smaller ones; the neck is found in varying degrees of hypertrophy and patulousness of the os; the feel is soft and velvety—appreciable to the touch; the entire cavity of the cervix, as far as the os internum uteri, may be ulcerated.

The discharge may be, first, pure pus, thick and yellow, thin and sanious, scanty or abundant, or mixed with mucous. "When the purulent secretion is very abundant and mixed with a large quantity of mucous, more or less reaches the exterior, and the patient is said to have the whites.

It depends on congestion, or imflammation of mucous follicles, and varies in character, according to seat and intensity. The white, milky, creamy fluid is the secretion of the numerous mucous follicles which cover the cervix and stud the upper part of the vagina. The result of mere congestion. The thick, tenacious, ropy, transparent, white-of-egg mucous issues from the cavity and os, and is secreted by the intra-uterine follicles. It is always a concomitant of inflammation of the lining membrane. When abundant, the discharge, in inflammatory cases, if not "entirely" purulent, but partly mucous. The discharge of pure pus would almost certainly be characteristic of gonorrhœa. Blood often mixes with the muco-purulent secretion, particularly after intercourse, and is then very significant of ulceration. In reference to the last pathological condition, inflammatory hypertrophy, though enlarged, it is at first soft, and at length indurated: chronic or acute, and sometimes attaining to a great size. It is generally the result of the extension of superficial inflammation to the central tissues, a *sequela*, not a cause of ulceration; but not always. The os, from round, becomes transversal-fissured, and one or other lip may be, and oftenest is, the seat of a more special enlargement than the other.

Dr. B. then goes on, in the manner of a man who has closely observed, and thoroughly understands his subject, and in language which will meet, with a response in the practical experience of every experienced practitioner, to speak of co-vaginitis and vulvitis, irritation of rectum and bladder,pain,dysmenorrhœa, or menorrhœa,sympathetic impairment of digestion, of respiration, of general nutrition, biliary derangement, and cerebro-spinal irritation. On all these, Dr. B.'s observation merit my highest praise, though I am compelled to deny them the merit of originality.

In reference to the common and very erroneous idea entertained and expressed by the public at large, and which it is at once the aim and effect of Dr. B.'s labors to refute, he says, and I must entreat the reader's attention to his words:

"The vaginal discharge which women, who are laboring under inflammatory ulceration of the neck of the uterus, often present, is all but universally supposed to be the result of constitutional weakness. This error is, perhaps, the most inveterate and general of all, and has been sanctioned during centuries by the writings of innumerable men of eminence." *A fortiori* is this absurd when the discharge is purulent. The sensation of weight and bearing down depends on inflammatory hypertrophy, and not on, as is generally supposed, falling of the womb from weakness or laxity of ligaments. Hence, the care demanded in the use of pessaries. By similar error, back-ache, as well as whites, is generally mistaken for indications of constitutional weakness. Ovaritis, hepatitis, stricture of rectum, affections of bladder are often wrongly supposed to exist in these cases. The general health, it is to be remembered, and nutrition of the system do not give way and sink in the female, any more than in the male without evident cause or tangible reason. *Pathological anatomy:* —Erosion or destruction of mucous membrane, submucous fibres exposed, ulcer not excavated, cervix in a state of cellular hypertrophy.

Dr. B. goes on to study the subject of inflammatory ulceration of the neck of the uterus in the virgin, of which again he seems to consider himself the discoverer, and which presents, he thinks, important modifications. I apprehend, however, from my own observations, and Dr. B.'s cases more particularly, that they are practically, as well as pathologically, insignificant.

We have now presented to the reader a succinct, yet tolerably ample analysis of Dr. Bennet's views on the pathology of uterine inflammation and ulceration, and its connection with leucorrhœa; which, based as they undoubtedly are upon truth, and practically accurate, are both interesting and instructive. They are easily deducible from what precedes, and suggest very naturally the practice which is required. I propose, without further inquiry into their validity, to show that they are neither so original, nor so startlingly novel, nor so wholly previously ignored, as to have taken the whole world by surprise, overwhelmed Dr. B. with illimitable glory, and affected a revulsion in sentiment and practice throughout the whole civilized globe.

The reader who is not well posted up in the subject of leucorrhœal pathology, will perhaps be astonished to find that, not only were Dr. Bennet's views promulgated by several European pathologists, and treatment based upon them, but that in this country he was anticipated in all his conclusions in a very precise and particular manner. In the years 1843 and 1844, the writer of this article, and his friend, Dr. Jas. Crane, now of Brooklyn, then associated in the department of diseases of women and children, in the Northern Dispensary of this city, devoted peculiar attention to this subject; and examining every case which applied, when practicable, with the speculum, collected a large fund of information in relation to it, and established, as they conceived, its true pathology more precisely than had hitherto been done. These facts, with certain collateral information derived from fellow-laborers in the cause of uterine pathology in this city, Taylor, Buel, Beales, and others, they published in an essay, in which also they exhibited the progress and state of the subject during the preceding one hundred and seventy years; noticed "the peculiar appearances of the discharge," and made an "attempt to connect it, more directly than has hitherto been generally done, with inflammation of the vagina, cervix, and lining membrane of the uterus."—(Vide N. Y. *Journal of Medicine* for May, 1845.) At this time, all that was known of Dr. J. H. Bennet and his opinions was derived from an article therein quoted from the *Jour. des Conn.*, November, 1843, admitting three species of ulcerations in the cervix. His views were then crude, limited, and unelaborated, and his allusion to the discharge merely a passing one. In no previous article had a description of its various seats and appearances occurred, as minute and accurate as in that to which I have alluded, and which Dr. Bennet, though doubtless his own was original, and the result of his own observations, might have copied, and, as we shall see, has scarcely improved upon.

I shall now proceed to show, first, that Dr. Bennet's views on the pathology of ulceration of the neck of the uterus, and leucorrhœa, are neither so novel, unprecedented, and original, and, consequently, so startling, as he seems to consider them; nor, is he entitled to all the merit of prior discovery that he claims, as he would easily have seen had he perused the article in question, while publishing his own; various other pathologists had anticipated him in the views which he seeks, justly as we think, to establish, and which do not differ materially, if at all, from those expressed by ourselves previously to all, save the first, of his publications on the subject.

Morgagni distinctly recognized, by post-mortem examination and the use of the speculum, the connection between leucorrhœa and inflammation of the vagina, os, and cavity of the uterus. Clark attempts to describe and classify the various forms of leucorrhœal discharge, and one of them he attributed to inflammatory action of the cervix uteri. Lagneau describes several varieties of discharge, and attributes them to a more or less inflammatory irritation of the membrane which lines the vagina, uterus, and tubes. Dewees, Capuron, D. D. Davis, Dupuytren, Jobert, Duges. all allude to the existence of uterine inflammation as a cause. The pathology of inflammatory disease of the os and neck of the uterus, as contained in the great work of Boivin and Duges, can scarcely be added to or improved upon, even by Dr. Bennet at the present day. Duparcque perfectly describes benign and primitive ulcerations of the neck. Churchill describes the discharges, and is well posted up from Boivin and Duges on the subject of a correct pathology of leucorrhœa. Lisfranc thoroughly understands the ulcerations of the neck and their connection with leucorrhœa, and his description of them leaves nothing to be desired. To go no further in the enumeration of those whom we have quoted in our essay, we can not but express our surprise at the self-complacency of an author, who declares, in his second edition, that the "results he has arrived at are so diametrically opposed to the opinions current in the profession, as reproduced by the most recent and classical writers on uterine pathology, that they must appear startling to those even acquainted with continental researches," and who thinks that the influence of "my writings has, in four years, been subversive of the opinions of a large portion of the profession."

Secondly, I shall analyze the results arrived at by Dr. Crane and myself, in the article alluded to, and compare them with those attained to by Dr. Bennet; the one derived from a two years gleaning of the scanty field of the Northern Dispensary; the other, the fruits of repeated harvestings of the fertile fields of, I know not how many, Parisian hospitals. We shall, in this way, be enabled to judge how far we, in this country, with minor appliances, preceded Dr. B. in the promulgation of those startling novelties of doctrine which have so completely, in a few years, changed the features of uterine pathology.

And, following the construction of our article, we commence *with the discharge*. Dr. Bennet makes three varieties. 1. Muco-pus. 2. An abundant, white, creamy secretion, the result simply of congestion. 3.

Transparent, glairy, mucous, like uncooked white of an egg—a principal form of the discharge. In the essay alluded to we acknowledge, from among those enumerated by preceding authors, "only the transparent, or colorless, like that which escapes from the nose on a cold day, (the third form of Bennet,) the thin, viscid, milky, starch-like, or *amyloid*, always follicular and cervical, the yellowish, greenish, or puruloid (the muco-pus of Bennet,) and the perfectly transparent, albuminous, ropy jelly which escapes in trembling, tenacious masses from the os, sometimes amber colored by blood, sometimes semi-opaque, like the white of egg which has undergone very slight coction, sometimes with yellowish or whitish streaks, sometimes even more purulent looking." We submit to all practical observers that this is a more accurate description of the varieties of leucorrhœal discharge than is contained in the great work of Dr. Bennet, who has not paid sufficient attention to the italicized variety, which then was, and for fifteen years subsequently has been, infinitely the most frequent form of leucorrhœal discharge coming under our observation, and concerning which we further say: "In bad cases of leucorrhœa, erosion without ulcerations, the mucous which bathes the neck looks thin, yellowish, or greenish, and very like pus, when accumulated in quantity at the bottom of the vagina. But, on removing it with a sponge, and extending it by pressure of the finger, it loses this characteristic appearance, and seems to be only the transparent, or semi-opaque, opalescent gelatinous mucous from the uterus, streaked with whitish stræ or flocculi." We claim that these are the facts and distinctions in regard to this variety of uterine leucorrhœa, which have been overlooked, or, at least, unnoticed by Dr. Bennet. We had not, at the time our essay was written, examined the discharge by the microscope, so as to be sure whether, or not, the yellowness depended on the presence of pus. The investigations made of late have, I believe, decided in favor of Dr. B.'s assertion that "the secretion from the surface of uterine ulceration is necessarily purulent," at least, in certain cases. Pure it is almost never seen, and even in the most purulent looking matter of the whites, we suspect it occurs in very limited quantity, if at all. The arguments which we have employed, in reference to this subject, on p. 45 of the second part of our essay, have lost, even at the present day, little or none of their cogency in favor of the occasional non-secretion of pus from inflamed mucous surfaces. The essay, moreover, contains information in reference to the stain, information in reference to the stain, quantity, etc., of the discharge, in connection with its varieties, which will be looked for in vain in Bennet or elsewhere.

We next come to the pathology of leucorrhœa. Referring to the *résumé* from Dr. Bennet, which we have quoted on p. 304, we request the reader to compare with it the following passages from our essay, published in May, of the year 1845, that in which the treatise of Dr. B. was published, and without any knowledge on our part at the time, of its existence.

"The pathology of (Ess. p. 46) of leucorrhœa is a high state of congestion and irritation, or of *actual inflammation*, of one or other, or all the tissues which compose the structure of the uterus and vagina." (See Bennet, p. 59, 4 Am. ed.) "The real cause of the morbid symptoms was the existence of local inflammation of the uterus and neck, with ulceration of the latter, are, in the majority of cases, the real causes of morbid uterine changes."

"We suppose that when an abundant, thick, semi-opaque, or striated, gelatinous mucous is exuding from the os, presenting a puruloid appearance in the vagina, the mucous membrane of the uterine cavity is of a deep red color, from sanguineous congestion, or inflammation, whence is secreted mucous, coagulable lymph, and, perhaps, pus." Dr. B. considers the discharge coming from the cavity of the uterus, or cervix, in connection with inflammation, to be a *transparent glairy mucous*, (which he also admits may be muco-purulent,) which, except in its stated want of semi-opacity, we take to be the same; otherwise, we have not seen the discharge which Dr. Bennet calls "transparent, glairy mucous," issuing from the os uteri, except as a physiological condition, and Dr. B. has not seen that which, to us, has ever appeared peculiar to a pathological state. We suspect, however, there is no material difference between us, though we wonder at Dr. B.'s insisting so much on the characteristic of *transparency*, as indicative of, and occurring in, inflammation of the cervix.

The essay continues:—"We suppose that when the thin, milky, or starch-like (amyloid) the mucous follicles, crypts, or glands of the vagina and cervix are in a congested, inflamed, and irritated condition; the body will oftenest be found to have become engorged, enlarged, tender, indurated; the neck swollen, hot, tender, of a deeper red than natural; the seat of superficial ulcerations, more or less numerous and extensive; one or both lips of the os tincæ are enlarged and engorged, the os gaping and red within, the vagina relaxed and redder than natural. All the signs of a (muco) metritis, of more or less acuteness, *of the neck* at least, will exist, of which the discharge is an important diagnostic, but which the speculum alone can fully, and always should be employed to reveal. Leucorrhœa, then, is rarely a disease *per se*, it is rather a symptom of an utero-vaginal inflammation."

Having thus shown ourselves to have simultaneously proclaimed in this country, if not actually anticipated Dr. B. in the announcement of the pathological views contained in his treatise, and so deprived him of the claim which he seems to make to almost exclusive originality, as well as shown that preceding pathologists had done very much toward establishing the true nature of pathological states of the uterus attended with discharges, the essay proceeds, in the clearest terms, to deduce the therapeutical consequences from them that Dr. Bennet does; to repudiate the idea of "weakness" as constituting the disease, or of a tonic treatment sufficing for the cure; enforcing the necessity of local antiphlogistic and alterative measures, and thus anticipating and confirming that very revulsion in sentiment and practice which Dr. B. seems to suppose has resulted wholly from his own writings on the subject. "Authors have blindly followed each other in attributing leucorrhœa, in defiance both of fact and analogy, to weakness, until the very terms of 'whites' and 'weakness' have come to be synonymous. But, thanks to the improved mode of diagnosis and a sounder philosophy, this long cherished error must, ere long, be abandoned, and the dependence of leucorrhœa on structural changes, even where great constitutional debility exists, conceded to be one of the best established facts in pathology. Debility supervenes upon the long continued local irritation, more from its constitutional effect on the nervous system and the disorders of function it occasions, than the profuseness of the discharge."—(Ess. cit.)

The essay is then continued by the narration of a great number of cases, reported with more or less accuracy, in which all the varieties of pathological states known to Dr. Bennet are exhibited, with the symptoms that accompany them in the great majority of cases, and every variety of the uterine discharge accurately described: the clear, tenacious, transparent, albuminous or white of egg, or healthy, from within the os, stiffening the linen only; the opalescent, semi-transparent, opaque, striated, gelatinous, puruloid or purulent when accumulated in the vagina, but whether or not containing pus globules we hold to be doubtful, staining the linen, more or less yellowish or greenish; the amyloid, milky, or starch like—the "follicular" of Clark and others—coming from the outer surface of the neck and inner of the vagina, not intra-uterine, stiffening the linen only. To these only can be added, as far as our experience extends, a rather profuse, thin, almost serous and tolerably transparent mucous, intra-uterine, without ulceration, and with a swollen and relaxed state of the lips of the os, without much redness or evidence of engorgement, a very obstinate form of the disease; and a staining of the ordinary form of mucous uterine discharge, with blood (resembling the rusty sputa of pneumonia), from exudation from, or abrasion of, the cervico-fundal uterine mucous-lining membrane; of which rare occurrence, an instance is at present passing under our observation. There is with it, slight engorgement of the cervix, and commencing ulceration around the os. The cases contained in the essay, besides exhibiting the pathological appearances of the neck and os in all their known varieties, accurately and sedulously discriminate between the forms of uterine discharges which are proper to each.

We have now, we trust, fully established the originality, accuracy and completeness of our own observations on this branch of uterine pathology. They were made independently of any other knowledge of Dr. Bennet's labors, than was contained in the article cited from his pen, and freely and complimentarily acknowledged in our essay. This appeared in April and July, 1845, having been long in preparation. The articles which, when collected, formed the first edition of Dr. Bennet's treatise, since passed through four editions, first appeared in February, 1845, in the *Lancét*, and finished in the May following. It is no less singular than true, that these articles had wholly escaped us in our extended and anxious search for authorities. It is seldom that there occurs such perfect coincidence in observation and theory, of object and result of pathological research, simultaneously undertaken by observers ignorant of each others's labors; and how gladly should we have availed ourselves of them, had they not been wholly unobserved. Not so ours by Dr. Bennet, since, in two subsequent numbers of the *Lancet* (1846), it was mentioned with encomium by the editor, and largely quoted, and also, as corroborative of his own views, by Dr. B. himself. However, in no later edition of his work has it ever been alluded to; and we appeal confidently to the generosity of our transatlantic *confrêre*, to do us justice in a future edition. We must claim for ourselves and our country, an entire originality of observation and of opinions resulting therefrom, and coevality of expressing them. With whatever other pathological views we may have shown ourselves acquainted, we knew, at least, nothing of those of Dr. Bennet; which we point to with pride, as confirmatory of those which we had ourselves arrived at, and which we are happy to characterize in this place, as marked by close observation, a happy generalization, and such an amount of practical experience and industry as falls to the lot of, and can be attributed to, but few writers of the day. Dr. B. has exhausted his subject. The effect of his labors on pathology and practice can not be doubted; and we only ask to be acknowledged to have accompanied him *pari passu* in his pioneer and to campaign, share with him the honor of his achievement.

Let us now examine the still more recent work, by Dr. Wm. Tyler Smith, entitled The Pathology and Treatment of Leucorrhœa, London, 1855; and see whether it throws any new light on the subject of which it professedly treats.

Dr. Smith, observing that much contrariety of opinion and acrimony of argument existed in reference to many points, and thinking justly that physiology is the basis of pathology, laboriously investigated, by means of the microscope, the anatomy of the cervico-uterine mucous membrane, and the constituent elements of the leucorrhœal discharge, and has thus contributed much valuable information, and sub-divided leuchorrhœa according to a strictly physiological basis, and thereby attained nearer to perfection, in its pathological consideration, than could have been done by depending wholly on the appearances presented by the unaided eye. It remains to be seen whether these interesting developments of that useful and elegant instrument have contributed, in a like degree, to more successful therapeutics.

Leuchorrhœa is, in some cases, a symptom. In some it is the disease itself. The discharges are neither to be ignored and referred wholly to inflammation, etc.; nor are we to consider leuchorrhœa generally as a distinct order, and so treat it. Taking it as a starting point, and investigating the different kinds of discharge, and the various states on which they depend, we may hope to attain to an exact knowledge of an important class of uterine affections.

We shall, in analyzing this author, allude to such points of minute anatomy, only, as may serve to throw light on the nature of the disease under consideration.

The microscope failed to detect the mucous follicles, usually described as covering the surface of the os uteri. A thick layer of scaly epithelium and villi with looped vessels, were the principal features which, in the structure of the mucous membrane of the os and external part of the cervix uterine, played an important part in the pathological changes which occurred in the lower segment of the uterus, in leucorrhœa. Within the rugous columns and intercolumnar furrows of the cervical canal, are large numbers of mucous fossæ and follicles, and numerous villi: and a very large extent of glandular surface was obtained for the purposes of secretion. In effect, the cervix was an open gland, and the *principal* seat of leucorrhœa.

The mucous secreted from the *neck* is always *alkaline;* that from the *vagina* always *acid:* a fact of consequence in describing the characteristic appearances of the leucorrhœal discharge.

The author claims for himself, like others who have preceded him, a great amount of originality. "No pathologist," says he, "has hitherto formed anything like a just appreciation of the parts borne respectively by the vagina and os and cervix uteri, in the production of leucorrhœal discharges. Effects have been constantly mistaken for causes, and secondary phenomena have received the importance due to those which are primary, while in practice, the most important structures have frequently escaped attention altogether. The consequence has been, that some have recommended the most violent measures of treatment, and others have rejected all remedial measures, except the most simple and inert." (p. 61, lib. cit.)

In the consideration of the different forms of leucorrhœa, the differences in structure between the vaginal and cervico-uterine mucous membranes, must be carefully attended to; the former, closely resembling the skin, covered by a thick layer of scaly epithelium, containing few, if any mucous follicles; its secretion *acid,* consisting entirely of plasma and epithelium; its object lubrication; the latter, a true mucous lining, covered in great part by cylinder epithelium, abounding in mucous follicles, pouring forth a true mucous *alkaline* secretion consisting of mucous corpuscles and plasma, with little or no epithelium. This latter forms the discharge in "mucous," the former secretion that in "epithelial" leucorrhœa. These varieties may co-exist, the one or other preponderating, but the *mucous* is the most obstinate and common.

*Cervical or "mucous" leucorrhœa.*—The discharge is a special glandular restriction, elaborated by the glands of the canal of the cervix uteri, the result of a morbid activity; that which should be only occasional and moderate, becoming constant and profuse. The string of tenacious mucous which hangs out of the os, is either clear and transparent, or whitened by the cogulation of its alkaline element by the vaginal acid. It lies, too, in a curdy or creamy state, on the walls of the vagina, not distinguishable by the eye from vaginal mucous itself. (This statement I consider very doubtful.) The fatty and oleagineo-albuminous matter secreted by the neck, is curdled by the vaginal acid, and looks like "soft soap." The acid vaginal secretion, mixed with the alkaline from the cervix, resembles milk or thin cream, and is composed of acid and albuminous matter. (Here are clearly the semi-transparent, opaque, tenacious mucous from the os, and the "amylaceous" of the vagina and outer surface of the neck, described in the essay previously referred to; with the advantage of a knowledge of the nature of their constituents, viz., alkaline plasma, mucous corpuscles, altered cylinder epithelium and fatty particles, which we owe to chemistry and the microscope.) In very severe cases, it becomes mixed with pus corpuscles (puruloid of essay), and blood corpuscles. Sudden gushes occur from mental excitement, and the quantity, in severe and long continued cases, may form a serious drain to the system, and a cause of functional or organic disorder. There is in some cases a secretion so profuse and watery, that all traces of viscidity are lost, which is very weakening.

"Epithelial" leucorrhœa is vaginal, and comes also from the outer surface of the neck, consisting wholly of epithelium, mixed with acid mucous plasma. In very bad cases, pus globules, and even blood are commingled. There is also mentioned a membranous form which we have never seen, and suspect it to have resulted wholly from the coagulating operation of injections. (Lib. cit. p. 67.) The leucorrhœa of young children is derived principally from the mucous follicles at the entrance of the vagina. "As regards the supposed cervical catarrh from the cavity of the fundus uteri, I have seen no cases in which there was any evidence that the sources of the discharge were above the canal of the cervix."

The above history of the various forms of leucorrhœal discharge, their sources and composition, leaves little or nothing to be desired, added to or detracted from. Their real nature is now, for the first time, established, and Dr. Smith deserves great credit for his industry and zeal. Dr. Smith proceeds, under the somewhat questionable caption of "Sequelæ of Leucorrhœa," to treat of inflammation, abrasion, ulceration, induration, and hypertrophy of the os and cervix, which he considers to be in the majority of cases, less often the disease itself and cause of the leucorrhœa, "than secondary affections resulting from the leucorrhœal malady." This idea is novel; it strikes a blow at the newer pathology which Bennet and ourselves have supported, and deserves a very careful consideration.

The simplest morbid state is a ring of vivid redness, more or less extensively surrounding the os, increased vascularity only, dependent upon the constant irritation of the acid surface of the margin of os by alkaline cervical discharge. Next comes loss of epithelium, and partial or entire denudation of villi. This is often called and mistaken for ulceration. It has the same origin as the first noticed condition. The third is superficial ulceration, or the granular condition of the os. Not only is epithelium destroyed, but the villi are destroyed entirely, or in patches of more or less extent. In this state there is a free secretion of purulent, or muco-purulent fluid. The erosion of the vascular loops is a frequent cause of hæmorrhage. Inversion of the canal of the cervix, is another state of the part often met with, and mistaken, no doubt, for ulceration. Among the other causes of morbid change in the os, and cervix uteri than the morbidly active condition of the cervical glands, may be enumerated pregnancy and parturition, ap'hous and herpectic cruptions, vaginitis, gonorrhœa, syphilis, the pressure of polypi, prolapsus, and occasionaly inde-pendent inflammatory types. Cervical leucorrhœa, in a word, rarely exists without inducing disorders of the os, which latter, on the other hand, rarely occurs without exciting leucorrhœa, which is almost sure to aggravate the original disorder.

We thus find that, while Dr. S. contends for the occasional separate existence of leucorrhœa, without accompanying lesions of the os and cervix, and for the general secondary character of the latter, he does not deny the conneetion between them, nor the necessity of logical treatment, and thinks that an inquiry into the exact pathology of the os, and cervix, and their morbid secretions, is necessary to bring back "the attention of the profession from the inflammation theory to one of sounder basis."

Induration and hypertrophy of the os equally depend on the long continued irritation of the leucorrhœal discharge. The author then ably describes, according to his theory of their consequential character, the order of succession of lesions, functional and organic, characterizing leucorrhœa. 1. Increased secretion. 2. Gaping of os and slight prolapsus. 3. The ring of superficial redness around the os. 4. Increasing quantity and acrimony of discharge. 5. Destruction of epithelium. 6. Loss of villi and granularity. 7. Induration, fibrinous deposit in, hypertrophy of cervix.

Among the constitutional influences of leucorrhœa may be enumerated the drain from the profuse discharge of mucous, pus and blood (?); hectic from its absorption (?); dyspepsia; derangement of menses; anæmia; the "heat and chill disorder," the first printed allusion we have ever seen to what our American ladies call "hot flashes;" neuralgia, pains in the side, back, and thighs, vesical and rectal irritability.

From the preceding observations, which embrace very nearly the entire field of leucorrhœal pathology, the reader will be readily prepared for the conclusion to which the author comes, and to which, I believe, we must subscribe as most rational and real. It will be seen that the pathological states of the uterus are not denied; nor are their consequences, in reference to the increase and continuance of the leucorrhœal discharge, nor the importance of physical exploration, or local treatment, on its cure. But any one who has frequently seen, as we have of late, profuse, weakening, and troublesome forms of leucorrhœa, with yet so little local disease of visible character as in no way to explain its occurence on the theory of its being a product of inflammation, and not to justify the adoption of any local measures for its relief, must, we think, with the able author, "differ very strongly from the opinions of those who refer almost all the conditions upon which leucorrhœa depends, to inflammation of the os and cervix." "It cannot," we fear, "now be disputed, that many of the affections of the os and cervix, recently stated to constitute ulcerations of the surface, are, in reality, only epithelial abrasions of more or less completeness." "The importance and frequency of ulceration" are probably "less than were formerly asserted;" and, when it does occur, it is often secondary instead of primary." "The vaunted importance of inflammation, as the great cause of uterine disorder, must be altogether modified;' 'epithelial abrasion' must take the place of ulceration; irritation or relaxation, that of 'inflammation.'" "The most common and immediate cause of leucorrhœa, is simple irritation of the glands of the cervical canal, and the abrasions and indurations of the os and cervix, are the results of the long continued discharge, rather than of primary inflammation."

The reader has, we conscientiously believe, in the foregoing paragraphs and pages, the true development of the nature, causes, and consequences of leucorrhœa, with a perspicuity and truth not hitherto previously attained. But while we give to the views of Dr. Tyler Smith, thus ably and practically expressed, the results of the most ample, careful, accurate, and scientific investigation and observation, our most cordial assent, and believe that we have in them a basis of theory and practice so firmly established as that no future researches will either alter or invalidate them, we must strongly protest against their being employed to dispense either with the physical examination or local treatment of the discharge itself, or the morbid conditions of the os and cervix with which it is connected, whether as cause or effect. For this purpose, the speculum must ever continue to be employed in severe cases, with increased utility and confidence: and this, we are happy to find, and we shall hereafter show, when treating of the treatment of leucorrhœa, is the strongly expressed opinion of the able author himself.

Whoever has been extensively engaged in the treatment of this frequent and troublesome disorder, must have often derived the greatest satisfaction and advantage from the local application of the scarificator, or leeches, caustics, etc., to the interior of the os and cervix, or uterine cavity itself, to epithelial abrasions and ulcerations; of iodine to the indurated and engorged cervix, etc., by means of this valuable instrument, applicable in no other way; and have become fully satisfied, not only of its great advantage over the older methods of treatment, constitutional and local, but of the utter impossibility of successfully treating many, if not most cases of this character, without its aid. And it is earnestly to be hoped that no futile and frivolous objections to its employment, based upon totally unfounded and most erroneous ideas of its immorality and indecency, insulting to the moral purity of the mind of the patient, and the results of prejudice and limited observation on the part of the practitioner, will ever be allowed to interfere with its employment. To those who employ it judiciously, in proper cases, its aid in removing the discharge in leucorrhœa, and in detecting and treating the lesions of structure with which it is so often associated, will be daily manifested, their confidence in its utility strengthened, and its indispensability proved. Without it, no physician can be sufficiently instructed in the condition of his patient, to determine or employ the means proper for her relief. To some of the objections raised, even very lately, and by men, we regret to say, of eminence in the profession, who should be found on the side of truth and progress, and give it, without prejudice or misrepresentation, the sanction of their authority, we shall hereafter reply.

We shall here close this essay on the strictly pathological part of the subject of leucorrhœa, which to the attentive reader and zealous student and practitioner, we feel assured, can be devoid neither of interest nor instruction.

In a future number of this Journal, we propose to continue our critical analysis of Dr. Tyler Smith's very excellent work, by the examination of some concomitant topics of great interest which it embraces. Among them, are the relations between leucorrhœa, syphilis, ghonorrhœa, and purulent ophthalmia neonnaterum; to the disorders of the function of menstruation; to sterility and abortion; and above all, the treatment of leucorrhœa. On which all the remarks of the author are able, practical, and highly instructive.—*N. Y. Journal of Medicine.*

### *Reproduction of Bones and Joints, after their Removal in cases of Whitlow.* By W. H. Toland, M. D., of San Francisco, California.

*Paronychia or Whitlow: its Consequences and Treatment.*—Although this is an exceedingly painful disease, and frequently destroys the parts affected, it has received but little attention from the profession, because it rarely endangers life. There are four varieties of Whitlow:

1st. That seated between the epidermis and cutis vera.

2d. That situated in the sub-cutaneous cellular tissue.

3d. That occupying the sheaths of the tendons.

4th. That seated between the periosteum and bone.

Every phlegmonous inflammation of the fingers and toes belongs to one of the forms of paronychia above specified. Every variety of this disease is excessively painful. The first three are speedily removed by a free incision; but the fourth is a much more serious affection. Even when treated early and properly, it frequently causes a destruction of the bone, in consequence of a separation of its periosteum; pus forms between that membrane and the bone; the former is detached, and the latter loses its vitality, and if not removed will be destroyed.

As the bone is formed by the periosteum, if the latter be not removed, and the soft parts are kept extended, the bones as well as the joints are re-produced, and the part restored to its former usefulness. It has long been known that the bone will be re-produced, provided the periosteum remains, and we only claim to have made the discovery that the joints are also, by proper management, restored, even under the most unfavorable circumstances. Whether they are as perfect as the original, possessing cartilages, ligaments, and synovial fluid, we are unable to say; but we know that they possess motion, and sufficient strength to perform the function of the most perfect joints.

James Clarke, a porter, now of Columbia, Tuolumne county, consulted us respecting the propriety of having the middle finger of the right hand amputated. He had been treated by a good surgeon, who thought its removal necessary.

As only the third, and half of the second phalanx were diseased, and believing that they would be re-produced, we advised their removal, so that if even there was no motion in the first joint, the finger would still be useful. An incision was made from the first joint, extending laterally, under the nail, to the same point on the opposite side. The soft parts were detached from the denuded bone, and the second phalanx divided with bone forceps about a quarter of an inch from the second joint. The wound was closed by the interrupted suture, and the soft parts retained in a proper position, by the application of splints and a bandage.

In four weeks, to my astonishment, *the bones were not only restored*, but also *a perfect joint was formed.* The finger is now as strong, and the motion of the newly formed joint as perfect as the original. Being a porter, he injudiciously used the finger before the bones were perfectly solidified, and a slight lateral curvature was produced; but in every other respect the finger is as perfect and useful as before the occurrence of the accident.

McGowen, now employed at Newland's stables, on Kearney-street, was advised, in January, 1857, by his physician, to have the forefinger of the right hand amputated at the second joint, and he came to our office for the purpose of complying with his instructions. Instead of amputating the finger, the phalanges were removed, and the wound dressed as in the former case In a few days, although requested to visit the office until cured, he renewed his occupation, and we lost sight of him entirely. On the 10th of June his finger was examined, and we found the second joint perfect, and the entire phalanx restored. The last phalanx, in consequence of the soft parts being allowed to contract, is short, although a joint exists, and the finger is as strong and useful as before the operation.

Shannon, a cooper, living at No. 6 Jackson-street, had a whitlow of the first forefinger, involving only the last phalanx, which was removed at the joint by a lateral incision. He resumed his business in a few days after the operation, and the finger was not examined for several months. The newly formed bone is shorter than the original one, although the motion of the joint is perfect, and the finger in every respect as serviceable as before.

Other cases might be given, if these were not considered sufficient, to establish the point in question.

Cullens, who lives on Stevenson-street, between First and Second-streets, had suffered for three months before he became my patient, from a whitlow, involving the whole of the right thumb. Free incisions had been made, without affording relief. The thumb was enormously enlarged, the first and second phalanges were denuded, and the flexor tendon near the extremity destroyed. Notwithstanding its excessively diseased condition, we determined to remove the bones, believing they would be re-produced, although we were confident that the thumb would not be as perfect as if he had received proper attention at an earlier period.

An incision was made upon the upper side of the thumb near the location of the extensor tendon, and carried upwards under the nail, and both phalanges removed. This operation was performed about the first of

April, and in six weeks the soft parts were healthy, and the bones and joints re-produced. Although he has but little control over the last phalanx, in consequence of the destruction of the tendon, the thumb is nearly as long as its fellow of the opposite hand. It presents a natural appearance, and is improving daily, both in strength and motion.

A gentleman, living near Redwood city, had suffered for several weeks from a similar disease, and was operated upon on the 15th of April, 1857. In his case a lateral incision was made, and both phalanges of the right thumb were excised. This case was progressing much more favorably than that of Cullen's, when he left the city, two weeks after the operation. He has not been heard from since, although no doubt is entertained of the entire restoration of both the bones and articulations.

In 1853, a carpenter was admitted into the State Marine Hospital with a compound comminuted fracture of the great toe. After remaining two months, and finding that union had not taken place, and that the bones were diseased, instead of amputating the toe, we removed the bones, and in a short time they were restored, although we were not aware of the re-production of the articulations.

Blaisdell, who then lived near Oakland, had the great toe of the left foot injured by a large piece of timber. When examined, we found the second phalanx diseased, although the foot was healthy. In December, 1856, an incision was made upon the internal side, and extended from the articulation with the metatarsal bone to the extremity under the nail. Both phalanges were removed, and the wound closed by the interrupted suture. In four weeks from the time the operation was performed, the bones were re-produced, and the patient could wear a boot without inconvenience. The articulations appear to be perfect, although the last phalanx was not diseased and was removed with the periosteum. This can only be accounted for by supposing that the periosteum detached from the second phalanx produced a sufficient quantity of osseous matto for the restoration of both. Mr. Blaidsell is now employed on Bird Island, and suffers no inconvenience from the injury.

In removing the diseased bones from either the fingers or toes, lateral incisions should be made to avoid the tendons; and the soft parts, until bony matter is deposited, should be supported by pasteboard splits, applied so loosely as not to produce pain. If they be found inconvenient, the other fingers or toes may serve as splints. Before the bones are fully developed, the member should be flexed occasionally, although the precaution was not taken in some of the most satisfactory cases given above. In Cullen's case, in consequence of the destruction of the tendon, an effort was made to produce anchylosis of the first joint, by the application of splints, but without success.

Many operations of a similar character have been performed in the United States Marine Hospital, but not being enabled to furnish the results, they have been omitted. Most of the cases cited can be examined by the incredulous, and the above statements verified. The result of these experiments is not only interesting but extremely useful. Useful because by the loss of a thumb a laboring man may be deprived of the means of pursuing the only occupation with which he is acquainted, and by which alone he can support himself and family. By the loss of the great toe, the strength of the foot is impaired, the gait is rendered unsteady, and locomotion fatiguing. Interesting, because it establishes the efficiency of the restorative powers of the human system more fully and unquestionably than anything that has heretofore been observed; and when assisted and directed by those who, from greater skill and experience, are more competent than ourselves, to act efficiently, results more brilliant than we can now imagine may be realized.—*Charleston Medical Journal.*

## *Medical Schools:* By S. C. Nott, M. D., Professor of Anatomy in the University of Louisiana.

Having been recently called to the professorship of Anatomy in the University of Louisiana, my mind has, necessarily, been attracted more closely to the subject of medical education, and with the view of posting myself up fully in all the latest improvements for teaching anatomy, and of comparing the advantages and disadvantages of various points, I have occupied the past summer in visiting many of the more prominent schools in the United States.

The present number of this Journal is about going to press in a few days, and although I have been but twenty-four hours in the city and have much else to occupy me in making arrangements for a change of residence, I have promised the editors that I will throw together hastily, the impressions which have been made on my mind, hoping at some future day to return to the subject more in detail.

It has been a prevailing idea, that the climate of New Orleans and other southern cities is an insuperable barrier to the full success of medical schools, and I confess that this prejudice has been very strongly rooted in my own mind. Though familiar with the fact that the history of medicine from the earliest epoch to the sixteenth century belongs almost exclusively to hot climates, yet the medical schools of temperate latitudes in our day, have so far outstripped the ancient seats of learning, that I had began to think that the sceptre of science, as of political power, had passed into the hands of those northern people who have of late been governing the world.

When I turned my mind more closely to the subject, and analyzed the causes of the downfall of ancient schools, I soon found that there was something at work more baneful than *climate*, viz: misrule and indolence. Egypt was the most ancient seat of medical science, both before the conquest of the Greeks and during the existence of her famous Alexandrian school. If we follow the map around the Mediterranean Sea, we find that the march of medical science for ages was still exclusively through southern climes—Arabia, Greece, Rome, and in the middle ages, Italy, in succession held all of medical science known to the world. But the beastly Turk in Egypt, Arabia and Greece, and the despotic Austrian in classic Italy, have crushed out not only medical, but every other department of science and literature. If there are no Hippocrateses, Galens or Celsuses—no Homers or Virgils—it is not because genius is extinguished in these races, but it is because despotism has placed its foot on mind and body too.

The great difficulty, to my mind, against which southern schools had to contend, was the difficulty of pursuing dissections during our mild winters, for not only is the putrefaction of bodies disgusting and unwholesome, but it is inimical to the successful pursuit of dissection. For without the aid of antiseptics, a body will keep in Boston during the winter, a month, while in Charleston or New Orleans, there are times when you could not work on one for a week.

Anatomy is the ground work of the science and art of medicine, and other things being equal, the student should always seek that school where anatomy is best taught. It is vain to talk of learning physiology, pathology, surgery, obstetrics, or practice of physic without anatomy, and it is infinitely better to have no doctors at all than to have incompetent ones.

Those climates and those localities alone which afford the fullest anatomical advantages, can meet the requirements of the profession, and the student who is really conscientiously seeking to prepare himself for the arduous and responsible duties which await him, should keep his eyes steadily on this point and not be gulled by newspaper puffs, circulars, and false promises. I repeat to the medical student, if you desire to effect anything useful or noble in our profession, go where you can learn thoroughly anatomy.

My doubts are now entirely removed with regard to the appropriateness of the climate of New Orleans for anatomical investigation, for we can preserve bodies perfectly in any weather, an indefinite period of time. I have just returned from Philadelphia, where I have received from my obliging friend Professor Leidy, much valuable information, and seen bodies preserved during mid-summer by means of antiseptics, as perfectly as they could be by the climate of Moscow or St. Petersburg. I dissected myself, in the private room of Professor Leidy, a body prepared under his direction, for two weeks, during the hot weather of September, and it was as sound and free from putrid odor the last day as it was the first—nay, more, the brain, nerves, and other soft tissues, were rendered much more firm than natural and the rapidity and minuteness of dissection was much facilitated.

No city in the United States can at all compare with New Orleans in point of abundance of material for the anatomical student. We can command bodies for dissection to any extent at an expense far below any institution I am acquainted with, in fact, at the moderate cost of transportation of subjects to our rooms.

The facilities afforded for clinical instruction in the city of New Orleans are not equalled anywhere in the United States, and surpassed, if at all, by few places in the world. I am writing in haste and have not time to look up statistics of later date, but have beside me the "Report of the Board of Administrators of the Charity Hospital for 1850," in which the statement is made that the number of admissions into this institution for the years 1850–51 were respectively 18,476 and 18,420. There has been no change in the administration since that time, and the usefulness and interest of this great establishment has never flagged. The number of patients fluctuates from six or seven hundred up to fifteen hundred, and when we state that it is under the superintendence of such "ministering angels" as the *Sisters of Charity*, nothing need be added to illustrate the internal management of this charity.*

We have already stated that the history of medicine, down to the middle ages, is to be sought exclusively among the people of warm climates; in fact, it is not until the seventeenth century that Germany, France and Great Britain began to take an active part in its cultivation.

Although we must gratefully acknowledge our indebtedness to Hippo-

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*The number of medical cases treated during the last year (1856) in the Hospital, was about 6,450; the surgical patients numbered 2,450; and the obstetrical cases, and those of special diseases of women and children about 500."*Annual Circular, Medical Department, University La.*

crates, Galen, Celsus and other great names of antiquity, so great were the prejudices and difficulties which opposed the study of anatomy, that it was not till the sixteenth century that dissections of the human body were common, and it is to classic Italy, with a climate similar to ours, that we must turn not only for the revival of medicine, but for that solid advancement in anatomy which has laid the ground work of rational medicine. The schools of Padua, of Pisa, of Rome, and of Florence will long be pointed to as a bright galaxy in our history; and the names of Fallopius, Eustachaius, Arantius, Cæsalpinus, Fabricus, Spigelius, Vasalius, of Scarpa, Morgagni, Mascagni, Valsalva, Malpighi, Spallanzani, and many other Italian names will stand out in honorable relief, as long as medical history is written and read. These laborers too have done their work in a climate not more favorable to anatomy than ours, and that without the immense advantages afforded us by modern chemistry in preserving bodies.

The museum of the University of Louisiana is unrivalled in this country. We need only state that besides numerous models from the best artists in France and England, we have duplicated the celebrated collection of the Grand Duke of Tuscany at the Academy of Anatomy in Florence, which is unsurpassed—the latter collection alone gives more than 350 dissections, representing in detail the whole anatomy of the human system. together with many illustrative models of comparative anatomy.

But there is another view of the subject which should give great weight to the value of southern schools. The fact is well known that the diseases of warm and cold climates differ as much as do their fauna and flora. It has been said that a young man should not go to a medical school with the expectation of learning the practical details of his profession, but simply to ground himself well in those fundamental principles which are to guide him in after life; and that this kind of knowledge can only come with the routine of a bedside experience. This is to some extent true, for in reality a medical student, after the ordinary routine of instruction, has learned little more than *how to learn*; but it is absurd to say, other things being equal, that there is not an advantage in a southern over a northern education, to those who are to practise in malarial districts. Those professors who have been for twenty or thirty years treating daily the diseases of the south, should certainly be more competent to instruct southern young men than teachers who have little or no experience with our diseases. I have never seen a lecture or essay from the pen of a northern lecturer on remittent yellow fever that I could read half through, for I could see internal evidence at every step, that he was talking of things at secondhand, and about which he knew nothing. A northern lecturer would laugh at the idea of a New Orleans physician attempting to teach him anything about pneumonia, so different is the type of the disease in the two latitudes.

Still I would say to the medical student, go to that school where you can learn most anatomy, physiology and pathology, for these are the ground works which without, a really enlightened and practical physician cannot be made, north or south, and it would be far better to annihilate the medical profession at once, than to fill the country with licensed quacks who are a curse instead of a blessing to society.

If, then, New Orleans possesses all the appliances for medical instruction in such extraordinary profusion, why, let me ask, can she not rear up a medical school, or schools equal to any in America? It is not my desire to make invidious comparisons, or to say unkind or ungenerous things of other schools. I should depise myself if I could be swayed by such feelings or such motives. The field of science is a Republic equally open to all; and with the population of the United States rapidly increasing, as it is, there will be room enough, and patronage enough for all those schools so located as to have the real substantial advantages necessary for medical instructions All that should be asked by a school is "day light and fair play," and I for one shall always be ready to give the right hand of fellowship to those who pursue science, not filthy lucre or false fame, but who, like men of honor, are willing to work in the cause of humanity, under the guidance of a fair, gentlemanly and scientific spirit.

New Orleans at this moment affords ample facilities for instructing 1000 medical students; facilities are increasing yearly; and so far from depreciating honest rivalry and emulation, I shall be glad to see it, for the great ends of science and humanity will by such means be the most surely attained.

Why, let me again ask, should not New Orleans become one of the leading seats of medical instruction in the United States? There is but one answer to this question—*all depends upon the medical teachers of New Orleans*—their energy, industry, and fidelity to the great trust reposed in them—if the schools fail it will be from the indolence, incompetence, and want of character of our teachers.

In this respect we may learn useful lessons from some of our brethren of the North. I have spent a considerable portion of the past summer in Philadelphia, the field of my early professional studies, and I still feel a pride in my alma mater which has been the mother of medical science in

America. I could not but admire the patient and enlightened industry with which this school, with its worthy rival (Jefferson School) have been laboring on from year to year in the good cause. May they long preserve the high position which they have so nobly earned, and remain as beacons to stimulate our exertions in the cause of science.—*N. O. Medical and Surgical Journal.*

[From the New Orleans Medical News and Hospital Gazette.]

## *Letter from Paris.*

Paris, August 30th, 1857.

Messrs. Editors: An humble pilgrim at the shrine of science, I bring you a few gleanings gathered among the "on dits" in medical circles. But this is a period of repose in the Schools; the annual harvest is gathered, and the master reapers—the Velpeaus, the Nelatons, the Trousseaus—have left the field of their labors to prepare for the coming campaign. You will at once understand that, the rich mine of medical instruction being suspended, we must turn from the hospitals and the amphitheatres to other sources of medical news. But though we must thus leave out of the question Practice and Surgery, we can turn to other sources and find that many a diligent laborer yet remains, still delving in the fields of knowledge, as if impatient at Time's unceasing flight, or eager, before their journey of life is o'er, to raise a corner of that impenetrable curtain which conceals from our sight as well as the secrets of the future many of the mysteries of our organization.

But as the morrow of to-day will soon have passed, and enrolled itself in the archives of historical lore, with its tale of weal or woe henceforth indelibly inscribed, we must be content to seek among these teachings of the past the assurance that progress and perfection should be the motto of man. Among those subjects which have more immediate relation to man himself, certainly none deserve a more important place, in its immediate bearings upon ethnological science, than the labors of the Physiologist; and here I would embrace not only those considerations which are purely relative to the laws of organic functions, but all those questions of Hygiene, Embryology, Histology, and intellectual capacities, all of which have so important a bearing upon the origin of man, his development, his capacities, his progress, and that scarce attempted question, his end and object, as a part of creation. It cannot be denied that in this programme of physiological inquiry, there are many points which are wrapped in primitive darkness. Let us, however, remember, that ages are nothing in the progress of truth, and that just as social and political reforms are the slow results of ages of abuse and tyranny, so the best established axioms in medicine have been the most contested, and the tardy growth in experience and observation. The nineteenth century may justly claim pre-eminence over others for the importance of its discoveries in physiology and medicine. It is only of late years that the experimental method has been introduced into physiology, by the illustrious Magendie ; and yet it has already revolutionized the dogmas of the schools, either by upsetting old theories, or confirming them by the rigid laws of demonstration, or introducing new ideas of which not even the germ had pre-existed.

It would be a most interesting though arduous task to assign to each nation the share which it deserves in the progress of physiological knowledge. Thus, starting from Haller, the greatest representative of the modern school, we might pass in review the influence of the German schools, the propagation of their labors in England, and America ; nor should we forget the Fontanas, the Matteucis, and other distinguished Italian physiologists. But we must undoubtedly assign the palm to that far famed French school, which, starting with Bichat, continues its brilliant galaxy with the names of Legallois, Richerand, Magendie, Berard, Beclard, Robin and others, until we arrive at the present time, and find the sceptre of physiology in the hands of Claude Bernard.

It were no easy task to bear the mantle which had been worn by so many distinguished predecessors, yet all Europe has acquiesced in that apostolic succession, and few but the envious or ignorant would gainsay the choice. Bernard is essentially the experimental physiologist of the day, and he has attained his present proud eminence by 20 years of indefatigable labor and research. Before Bernard, before Magendie himself, Legallois had led the way by experiments upon living animals, though we might turn further back to the remarkable era when Harvey demonstrated before a monarch the circulation of the blood on a living fawn. There can be no doubt, also, that Haller discovered by actual vivisections the the doctrine of irritability and excitability, which he first propagated to the scientific world ; still these were but isolated facts, and no regular method or system had as yet been adopted or pursued. Bichat, the immortal author of the Researches on Life and Death, was more of a pathological anatomist than a physiologist, and it is probable that he built up his great work on general anatomy, of which he was the founder, by observations on the phenomena of disease. Endowed with a gigantic intellect, Bichat unfortunately allowed his fondness for system and theory to allure him from the narrow road of observation and reality. He accounted for all the phenomena of living bodies by supposing that each tissue was endowed with certain vital properties, from the mutual play and coordination of which resulted life, considered as a whole; whereas, physical and chemical actions were peculiar and inherent to the inorganic world. It is scarcely necessary now-a-days to refute such a proposition, when we remember that digestion is a purely chemical phenomenon. But Bichat died at the early age of 32, and we may easily understand that the immense structure whose foundations he thus laid, must have been wanting in harmony and strength. Legallois, the cotemporary of Bichat, survived him a few years, and contributed many important additions to our science, yet he is scarcely known at the presen. day, though his "Experiments on the Principle of Life," is a most ret markable production, and a translation appeared in Philadelphia, where he was chosen corresponding member of the Medical Association in that city.

Bichat died in 1820; in 1808 Magendie appeared upon the stage, and during forty years the torch, with which he explored so many obscure questions, never wavered in his hands, or wandered from the strict path of observation and experiment. Systematically opposed to the method of generalization and dogmatic theories which had been so much the fashion before his time, Magendie adopted the strict interpretation of nature, and only admitted as a fact that which he had corroborated by observation; so that he never departed by analogy or hypothetical reasoning, from the stern reality of experimental deduction. His devotion to this method, which he admitted as the sole criterian of truth, may sometimes have been pushed too far, yet it could scarcely mislead him long, and he has often been accused of inconsistency when he had barely related experiments which, as so often happens in physiology, were apparently in opposition with each other. Such, for instance, were his remarkable labors on the functions of the anterior and posterior roots of the spinal nerves. He saw that sometimes the anterior roots were endowed with sensibility; at other times they appeared insensible. In later times his disciple and successor, Bernard, was the first to show conclusively, that this peculiarity depends upon the so-called reflex function of the nervous system, and that it varies according to the point where the section of the motor nerve happens to be made. Thus it was that Magendie invariably stated the facts as he saw them, without ever attempting to distort them in order that they might serve some preconceived opinion or theory.

When Fred. Tiedmann, the great German physiologist, visited Paris several years ago, he called upon Magendie, who was then occupied with his researches upon the cerebro-spinal fluid. The French Professor explained to his guest that the cerebro-spinal fluid was interposed between the nervous centres and the arachnoid; that it is continuous along the spinal cord, where it subserves the important function of protecting those delicate textures from any sudden or violent shock. But the German philosopher at once objected. "It is impossible," said he, "that this can be so, for has not Bichat established the law that all liquids must be contained within a serous cavity? Now, the arachnoid being a shut sac, this liquid evidently must be within the membranes." I do not care about Bichat's law, answered Magendie, but I will certainly show you that the cerebro-spinal fluid is beneath the reflected portion of the arachnoid; and this is accordingly the fact now universally admitted. Magendie believed that we were removed from the time when any general dogmatic treatise could be written on physiology, and he considered that the science was far from being firmly settled on its foundation; and that generalization should only be followed when a sufficient number of uncontested facts have been accumulated. The vanity of men, he said, often leads them to compare themselves, each in his own sphere, to some great name or object to which they fancy themselves either approaching or similar. Some have compared themselves to Archimedes, or to Michael Angelo, or a Newton, or a Galileo. Louis XIV compared himself to the sun; but for my part I am more humble in my simile. I fancy myself like a ragman, for with a hod on my back, and stick in hand, I go through the by-ways of science, picking up all the detached facts I may find on the road. Such was Magendie, and such was the tendency and object of his labors. His severe and unbending devotion to experimental truth was necessary at the time in which he lived, and he is justly entitled to the credit of having diffused throughout Europe his methods of vivisection, to which we owe those rapid strides that of late years have signalized the progress of physiology. If we may believe that a pure and etherial essence survives the dissolution of an earthly mould, we can fancy that the spirit of this great man yet hovers around that laboratory of the College of France, where for forty years he pursued his researches in the properties of organized beings. But the genius which guided him through his long ministry has certainly survived him, and the discoveries of Bernard have even eclipsed those of his master and predecessor. From his present exalted position, though he might safely rest on the laurels he has secured, with true devotion to the cause of science, he only considers the achievements of the past as motives for future exertion; and he is now as unremitting in his labors as if he were at the threshold of the temple of which he is now the grand high-priest. Nor does he sit in his chair with unalloyed peace; more than one parasitic insect has attempted to buzz himself into notoriety by attacking the writings of Bernard. Their object is attained if they attracted a passing notice from the press of the day, and their highest ambition is to secure a report on their hybrid productions from the Academy of Sciences. But these pigmies soon sink into that oblivion from which they strive to raise themselves by their noisy though empty clamors. But every true lover of the science will learn with regret that a great name has also lent itself to a series of attacks as violent as they were unfounded. I mean Pierre Berard, Alas! the Berard of to-day is not the same as the author of the Lectures on Physiology—the same in person, but not in mind. Last year he had a severe attack of apoplexy, and I fear some softening of the brain consequent thereon, now incapacitates him for that impartial and just appreciation of men and their works, which was so eminently characteristic of the learned professor of the Faculty. He has undertaken a series of experiments to disprove Bernard's theory on the function of the pancreatic juice, and lately published the result of his labors in the shape of a violent philippic against the Professor of the College of France. Berard associated with him in his unenviable labors, a certain subaltern veterinary of Alfort, who has undertaken the anatomical part of the experiments; for Bernard, it is well known, has never performed a vivisection in his life, and his book was written from the materials accumulated by others. In this case, his choice of a Moderator has been most unfortunate, for I have heard two of the Professors of Alfort, Messrs. Chauveau and Boulay, declare that they have not the least confidence in any experiment of their subaltern, Colin; and it is well known that he will distort any fact to suit his purpose. In the present case, he pretended that a ligature of the pancreatic duct does not prevent the digestion and absorption of fatty substances. This assertion will, no doubt, appear monstrous, yet the hardihood of its author is only equalled by the falsity of his conclusions; nor would it attract more notice or belief than the assertion of some pretended astronomer, who revived a short time ago, the old exploded idea that the sun revolves around the earth, if it were not that a great though fallen mind has associated his name to these ill-shapen and monstrous productions.

At the same time that the discoveries of Bernard have placed the French Schools of Physjology above all others, so that we can well assert that the nineteenth century has paid its debt to the ever accumulating fund of human science, and realized many important steps in the law of progress, we can even look beyond the present time and discover the promises of the future. It would seem as if the indefatigable Professor of the College of France where determined to leave no part of physiology unexplored, for, besides the discoveries which have already made him famous, viz: those on digestion, the pancreatic juice, the saliva, the functions of the liver, the secretion of sugar in that organ, and many others besides, he is now preparing two volumes on the Physiology of the Nervous System, which are expected to be published sometime in November, and these will be no doubt the most complete monographs ever published on these obscure and complicated questions. But when I speak of the future, I do not mean even these, for they are a continuation of his admirable labors, and those who have had an opportunity to follow his lectures or attend his private experiments are already acquainted with many of his conclusions on the functions of the nerves. There is another department of physiology, which is destined at no distant day to shed new light on the organization and properties of living beings—I mean microscopical science. The microscope, as an instrument, has long been known, and every one is aware that De Graaf, Lewenhoeck, Malpighi, and many others successfully applied this instrument to the study of organized bodies; but it is only of late years that histology, or the application of the microscope to the study of the different textures of the human body, has really grown into a science. But. as a science, it has now acquired an independent growth, requiring for its mastery the most laborious and untiring industry. It is impossible at this day to give a correct appreciation of the value of microscopical investigation, for its deductions are yet so far removed from the standard of ultimate perfection, that many, even fundamental questions, are as yet mooted points with many writers, although, to the practiced and enlightened microscopist, the applications of this instrument are as unerring as those of the eye itself in those grosser structures where the latter needs no such assistance. One of the causes of popular objection to the microscope, is the belief, common to all beginners, that any of the tissues of the body can be at once recognized by simply putting a specimen supposed to contain this or that element under the objective of no matter what magnifying power. Now the truth of it is, that it is exceedingly difficult, in the first place, so to separate and dissociate many of the different elements which enter into the composition of a given structure, that it may be recognized by the unpracticed eye. Take, for instance, a piece of muscular tissue; perhaps you will expect to recognize at once the ultimate fibril of animal life; you will desire to see the difference between the voluntary or striated, and the involuntary or smooth muscle. You read in almost any text book that such is the fundamental element of these two varieties of muscular tissue, and that its contractility depends upon that very element, at the same time that another tissue is so disposed as to restore the fibril to its former position; you will see that your author has employed the pencil of some cunning artist to depict for you with all the delicacies of light and shade, the transverse and longitudinal striæ; well, perchance you have secured one of these instruments, yclept a microscope, and scalpel in hand, you are prepared to dive into all the mysteries of organization and life, you will verify if Carpenter, Queckett and Hassel have correctly delineated these structures. You secure a splendid piece of muscle, and you put a specimen· under your objective. Alas! cruel deception, your preparation is too thick; the light does not penetrate, and you see nothing but a dark and confused mass; after many efforts you have succeeded in dilacerating your preparation so that little if anything apparently is left on your object glass, and again you examine attentively this elaborate preparation, and even then you may be doomed to disappointment until, in utter despair, you come to the conclusion that the microscope is a useless instrument, and micrographers very little better than humbugs. The conclusion is natural enough; and yet, it is false as it is unjust; it is false because what you have read was the result of a preparation by a master hand, who selected from scores of preparations, what he considered the type of the element he described; it is unjust, because you have no right to expect that in an hour or a day you can acquire that dexterity of manipulation which is the slow result of practice and experience. Have you forgotten the time when your first subject was on the table before you, and armed with your scalpel, you were about to take your first lesson in practical anatomy? for the first time you were face to face with death. Your overcame your scruples with no matter what unsteady hand, and you commenced imitating either those around you, or the skillful dissection of your demonstrator; you saw him exposing before you with rapid and unerring skill the fibres of muscle after muscle, but when you resumed the task how different your production from the artistic execution you had just witnessed. Did you throw away your knife in disgust, or fancy your fingers were differently made from those around you? No! you persevered until you acquired sufficient dexterity for all practical purposes. Now, there is no question but that microscopal dissection is far more difficult than the other, and a very little reflection will at once convince us of the nature of the difficulty in hand. We are applying an instrument which magnifies several hundred times, perhaps, to investigate the very secret of life, the intimate nature of that fabric which is the master piece of creation, and we can reasonably expect that we shall at once lift the veil, and surprise the essence of that being without due preparation and initiation? The learning which is so easily acquired, is not worth having. No, in that investigation, no matter what texture, even the simplest, we can not expect that its elements will be presented to us perfectly isolated and distinct. Far from it, they are so blended and interwoven, that it requires much patience, and often renewed efforts to separate them one from the other, or to recognize them when they have been at last obtained with satisfactory distinctness. Let us return, for instance, to our piece of muscle, and see of what it is made up; in it are many different elements besides the fundamental or constituent element, viz: 1. The myolemma or investing sheath of each fibril. 2. Elastic fibres. 3. Cellular tissue. 4. Cells containing fatty matter. 5. Capillary vessels of three different kinds. 6. Arteries and vein. 7. Nerves. Now, can we reasonably expect that we shall at once distinguish all these, and recognize them even when the preparation is made by a master hand; by no means; for the eye must be educated to interpret that which is presented to it in the field of the microscope; it must be taught to recognize the elements when separated, and then we can better appreciate the aws of texture, that is to say the reciprocal arrangements of these elements, one with the other. Just as the ear of the practiced musician, or the eye of the painter, distinguishes nice shades of color, delicate intonations of sound, which escape the uneducated, so will the eye of the microscopist distinguish the fundamental element of a healthy tissue, or recognise the abnormal development of some other product in a diseased condition. But, however difficult the study of microscopal anatomy, it is replete with interest of the most profound and satisfactory kind, and the more we advance in its study, the more we rise in admiration of that great First Cause whose wisdom is incomprehensible, whose greatness incommensurable.

Carpenter, in his admirable book on the Microscope, has paid a just tribute to this instrument as a means of scientific research, and I cannot do better than quote his eloquent lines upon the subject. "As an optical instrument, the microscope is now at least as perfect as the telescope: for the six feet parabolic speculum of Lord Ross's gigantic instrument is not more completely adapted to the astronomical survey of the heavenly bodies, than the achromatic combination of lenses, so minute that they can scarcely be themselves discerned by the unaided eye, is to the scrutiny of the physiologist into the mysteries of life and organization.

Nor are the revelations of the one less surprising to those who find their greatest charm in novelty, or less interesting to those who apply themselves to the study of their scientific bearings, than are those of the other. The universe which the microscope brings under our ken, seems as unbounded in its limit as that whose remotest depths the telescope still vainly attempts to fathom. Wonders as great are disclosed in a speck of whose minuteness the mind can scarcely form any definite conception, as in the most mysterious of these nebulæ whose incalculable distance baffles our hopes of attaining a more intimate knowledge of their constitution. And the general doctrines to which the labors of microscopists are manifestly tending in regard to the laws of organization, and the nature of vital action, seems fully deserving to take rank in comprehensiveness and importance with the highest principles yet attained in physical or chemical science." Such then is the nature of microscopal investigation, and such the promises it holds for the future, and at no distant date we may expect to hail the fulfilment of these promises.

Much as Koelliker, Lebert, Mand, and many other distinguished names, have added to this important branch, there was still much obscurity, confusion, and contradiction in their writings, nor was there sufficient method in their investigations; and, above all things, they had not properly defined the relation between general anatomy and physiology. It is not often that one mind can be so far successful as to originate and perfect one branch or department of human knowledge. True, Lænnec, the discover of auscultation, had so far completed his immortal work, that he left very little to subsequent investigators. But surely he who introduced method where chaos previously had ruled supreme, he who classified the morphological elements of the body, and distinguished the fundamental from the accessory, he who was the first to show the origin, the development, and decay of every tissue, its nutrition and its growth; such a man is entitled to no ordinary credit, and I need scarcely say, that wherever medicine is studied as a science, and physiology considered its true ground work, there the name of Charles Robin is honored and respected. And yet the time has not arrived when full justice can be awarded to the genius and talent of this extraordinary man. Science has never beheld a more ardent devotee, Truth a more unflinching champion. Combine these qualities with intellectual qualities of the highest order, and you can readily conceive what such a man may accomplish. Though he has been giving public lectures on General Anatomy for many years, he has not published any dogmatic treatise on the subject. He has been, however, accumulating materials with assiduous care during all this time, and the work, now in the hands of the printer, will probably be complete sometime next fall. Others, more ambitious of publicity than scrupulous about scientific accuracy, have sent out to the world productions which, though remarkable in themselves, are nevertheless, wanting in that maturе and harmonious co-ordination which is the slow result of time and experience. His forthcoming work on Histology is the fruit of the most careful and laborious investigation of every tissue, normal and pathological, entering into the composition of man; and there can be no doubt that the profession will hail its advent with joy, as a sure and infallible guide in these delicate questions.

Mr. Robin has already published several other works, which have secured for him a most exalted reputation, at home and abroad. A late number of the American Journal of Medical Sciences, contained an able review of his Treatise on Chemical Anatomy, a work remarkable for its elaborate, yet lucid exposition of the Physiology and Chemistry of the tissues; for, as he has himself said, he undertook this work as an introduction to his General Anatomy.

The object, said he, of my Treatise on Chemical Anatomy, is to enable the anatomist and the physician to know exactly the intimate molecular composition of any organized body, in either of its three forms, whether solid, semi-liquid, or liquid. So that the object of the work is, to examine the organic matter of all the particles or elementary principles which, by their molecular union, compose these different substances. He does not attempt the study of organized matter itself, but of the elements which enter into its composition. He therefore proposes to reduce organized matter into its constituent parts, and to examine the properties which are peculiar to these elements taken separately, or irrespective of their position in the animal economy. He defines the elementary particles of organized substances to be those which are the result of true anatomical analysis in contradistinction to chemical analysis. These particles must be studied separately and alone by mechanical separation, but not by destructive agencies. This statement at once explains the aim and object of the work as distinguished from other treatises, and it is certainly one of the most original productions on this important subject. Mr. Robin has also published an excellent manual on the use of the Microscope, explaining at the same time its optical principles and practical uses, being a most excellent introduction to Microscopic Science. Many of his lesser works have been published in the Memoirs of the Society of Biology; and his edition of Nysten's Dictionary of Medicine, which he entirely re-wrote and re-modeled, is a monument of his vast learning and untiring industry. This book, though professing to be merely a Dictionary of Medical Terms, is also an excellent epitome of almost every head which is there treated; and the different articles on Histology are considered the best authority on this important subject. The work was so far successful that in the course of two years an enormous edition has been almost entirely disposed of, his fortunate publisher realizing some thirty thousand francs from the operation. Sic von, non vobis, etc.

During all the summer, Dr. Robin has been employed upon these two works, viz: a new edition of the Dictionary of Medicine, and his Treatise of General Anatomy; but he also delivered an excellent course of lectures on the latter subject, and we hope, at no distant day, to submit our notes thereon to the readers of the Gazette. A. P.

# EDITORIAL AND MISCELLANEOUS.

## To Subscribers.

It was announced at the commencement of this volume, that the publication of this Journal had been transferred to Messrs. G. P. Eddy & Co. We would now state that this arrangement has been cancelled, and the Journal will be published as before. All communications relating to the subscriptions or the business affairs of the Journal should be directed to J. G. Westmoreland, M. D., Treasurer, and all having reference to the Editorial department should be directed to the Editors.

## Atlanta Medical College.

The chair of Obstetrics and Diseases of Women and Children having become vacant by the resignation of J. Boring, M. D., it has been filled by the appointment of Thomas S Powell, M. D., of Sparta, Geo., a gentleman of high character and distinction in the profession, who will doubtless occupy the place with credit to himself, and to the advancement of the interests of the Institution. It will be perceived from the recent announcement of the Dean, that there continues to be in certain quarters a most singular misapprehension of the principles that govern and direct the College, in reference to its term of Lectures. *Again* and *again* we state that the Atlanta Medical College has only *one* session during the year, with the *full* interval between the Courses. The applicant for the degree must have arrived at the age of twenty-one years, and must be of good moral character; he must have been engaged in the study of medicine the usual time required by other respectable schools of Medicine, under the direction of a competent instructor; must have attended two full courses of Lectures in this Institution, or one in this and one in some other accredited school of Medicine, and in addition to these requisitions, the Faculty reserve the right in all instances to revoke the degree when sufficient evidence is afforded that he upon whom it was conferred is engaged in irregular and unprofessional practices.

Based upon principles equally high with those of any other Institution in the land, it has continued to progress, and is now in every particular taking a stand in the highest degree creditable, notwithstanding it has had to encounter a most inveterate and *unscrupulous* war from one or two *rival* schools, who happened to be a little in advance in the period of their establishment.

## Bibliographical.

We have received, from the publishers, through Messrs. J. J. Richards & Co., Booksellers, of this city, a number of valuable medical works, recently issued from the press of Messrs. Blanchard & Lea, of Philadelphia; and first, we notice,

*Diseases of the Skin, by Erasmus Wilson, F. R. S., fourth American, from the fourth and enlarged London Edition,*

Containing 649 pages, and of a very comprehensive character, upon a most interesting, obscure, and little understood, but exceedingly important class of diseases. It comprehends the Anatomy and Physiology of the skin; classification of diseases of the skin—General Pathology and General Therapeutics of the same structure, Erythematous or Exanthematous Eruptions, Lichenous or Papulous Eruptions, Eczematous or Vesicular Eruptions, Impetiginous or Pustular Eruptions, Herpetic and Bullous Eruptions, Furuncular Eruptions, and Scorbutic Eruption; diseases arising from special internal causes, as Lepra Lupus, &c.; diseases arising from special external causes, as Scabies, Malis, &c.; diseases arising from the syphilitic poison; diseases arising from animal poisons of unknown origin, and giving rise to eruptive fevers, as Rubeola, Scarlatina, &c.; diseases affecting the special structure of the skin, embracing those of the vascular, nervous, papillary and pigmentary structures, with those of the sudoriferous and sebiparous organs; and, in addition, diseases affecting the hairs and hair follicles; nails and nail follicles, with a history and description of the Itch Animalcule, ("acarus scabiei") and of the Steatozoon Folliculorum,selected formulæ, and a very complete index. In reference to the present edition of this work, the author remarks: "I have arranged a new system of classification founded on the only true practical basis, the *cause* of the disease."

We doubt whether a better work upon the subject can be placed upon the table of the practitioner.

*Human Histology*, in its relations to Descriptive Anatomy, Physiology, and Pathology, with four hundred and thirty-four illustrations on wood, by E. R. Peaslee, A. M., M. D., Professor of Physiology and Pathology in the New York Medical College, of Anatomy in Dartmouth College, and of Surgery in the Medical School of Maine, member of the American Medical Association, &c., &c.,

"The aim of which is to give a connected view of the simple chemical elements, of the immediate principles, the simple structural elements and the proper tissues, entering into the composition of the fluids and the solids of the human body, and to associate with the structural elements and the tissues, their function while in health, and the changes they undergo in disease." "In regard to the dimensions of the minute structural elements, the work being intended especially for those who use the English language—they are given in fractions of an inch, instead of a millimetre, or a Paris line, as has usually been done by translators of German and French works, both in England and in this country."

From the examination we have been able to give the work, our impression of its merits is decidedly favorable. The subjects embraced are all important, and we agree with the author "that the only rational method of imparting a knowledge of *function* is by associating with the latter all that is known of the forms and relations of the structural elements, and of their chemical composition, in each part and organ." Pathological Anatomy and Pathology being placed in the same relation.

"*Principles of Medicine, an Elementary view of the causes, Nature, Treatment, Diagnosis and Prognosis of Disease, with brief remarks on Hygeinics or the Preservation of Health.* By CHARLES J. B. WILLIAMS, M. D., F. R. S. *A new American Edition from the third and revised London Edition.*"

This work, a new edition of which has been issued by Messrs. Blanchard & Lea, is so well known and so highly appreciated by the more scientific portion of the profession, that it may be considered standard, and it is only necessary to say, that considerable additions have been made to the present volume, bringing it up more fully to the present state of Physiology, General Pathology and Therapeutics, all of which it contains, to a very large extent. No Medical Library can be considered complete without it.

*Manual of Physiology.* By WILLIAM SENHOUSE KIRKES, M. D., Fellow of the Royal College of Physicians, &c., &c.

This is a new and revised American edition of the same Publishers, from the last London Edition, with two hundred illustrations, which has undergone a recent and careful revision at the hands of the author. This work having been selected by a number of Medical Colleges, as a text book, is perhaps the highest evidence which could be furnished as to its merits; and, to all, save those who desire an elaborate work, we would recommend it as the very best book on Physiology, with which we are acquainted, either for the student or practitioner.

We next find upon our table

"*The Effects of Climate on Tuberculous Dssease.* By Edwin Lee, M. R. C. S., London," and "*The Influence of Pregnancy on the Development of Tubercles.* By Edward Warren, M. D., of Edenton, N. C.,"

being two Essays combined in the shape of a handsome book. Though we have not yet been able to read them, our readers, we are sure, will consider us fully justified in commending them to their attention, when we state that "Dr. Caleb Fiske, who was President of the Rhode Island Medical Society in 1823 and 1824, at his death bequeathed to that Society a fund of two thousand dollars, directing the annual income to be expended in premiums for Essays on subjects selected for competition. The first premium of forty dollars was awarded June 27th, 1836, since which time a large number of valuable dissertations have been laid before the profession through the instrumentality of Dr. Fiske's well directed munificence. By the judicious management of the Trustees, the fund has gradually increased, and they are now able to offer two annual prizes of one hundred dollars each. *The Essays in the present volume are those to which the prizes of* 1855 *and* 1856 *were awarded.* Connected by the topics discussed, and presenting a large amount of important information on one of the most interesting and difficult subjects of medical science, the Trustees have been desirous of presenting them in a more permanent form, and they have been accordingly reprinted in their present shape from the *American Journal of the Medical Sciences*, for April and July, 1857, in which they originally appeared."

And lastly (though not least in value,) among the books received upon this occasion from these enterprising publishers, we come to notice

"*Lectures on the Diseases of Women.*" By Charles West, M. D.," &c.,

Being, as the author remarks, a first instalment towards the discharge of that debt which the opportunities of a hospital and the responsibilities of a teacher have imposed upon him, promising within three years a second volume, which will treat of all the remaining diseases of the female system, this part being exclusively devoted to "Diseases of the Uterus." Embodying as this book does, the results of ten years' observation in the wards of a hospital, (St. Bartholomew's,) by a distinguished physician and accoucheur, it should at once command the attention of the profession, and we can assure those who may purchase it that they will not regret it. The author is clearly not a man of "one idea," or a contracted specialist, but of large and comprehensive mind, and much more practical than the most of those with whose plan of treating female diseases we have been familiar. The truth is, in our humble view, there has been and is a radical defect in treating diseases of this description, in many instances amounting to an apparently complete forgetfulness that the subject possessed any other organ than the Uterus, and an utter disregard of the most common and well understood physiological laws. As our author remarks, while absolute rest for a time is needed during the employment of the medical measures proper for the relief of uterine disease, it should never be forgotten that there are certain positive evils to which prolonged rest exposes a patient, both by the general interruption of her health from the confinement, and also by the almost inevitable direction of her thoughts, during the days of seclusion, from her ordinary pursuits and ordinary amusements, to the seat of suffering. The lectures embrace the Symptoms of the Diseases of Women—Menstruation and its various derangements; diseases of the Uterus proper; inflammation and ulceration; misplacements of the uterus, and the allied misplacements of vagina, bladder and rectum, their nature and mode of production; uterine tumours and outgrowths, with the treatment of these various departures from the state of health.

As previously intimated, the works which we have very imperfectly and briefly noticed, may be had of, or will be promptly ordered by, Messrs. J. J. Richards & Co., Booksellers, of this city, who keep constantly on hand a fine assortment of medical works.

In addition to the above, we have received the

*Transactions of the American Medical Association for the year* 1857,

Being the tenth volume, a copy of which every physician in the land should have in his library. The book can be obtained of Casper Wistar, M. D., of Philadelphia, by sending on $3.00.

No death from small pox has taken place in Providence (R. I.) for 17 months past. In the same city, during the last six weeks, it is estimated that there have been not less than 5000 cases of influenza—only four of which have proved fatal —*Boston Medical and Surg. Journal.*

*Iodine Injections in Uterine Hemorrhages.*—M. Dupierris, of Havanna, recommends, in the *North Amer. Med. Chir. Review*, iodine injections into the uterus in all cases "laboring under chronic uterine hemorrhage, no matter how caused, whether by an organic affection or a functional derangement." He says: "The injection is repeated, if necessary, at the end of three or four days. The next day the hemorrhage is found to have lessened; it diminishes the following day, and generally disappears on the third." "I have resorted to this method of treatment more than a hundred times, and found but one case to resist it. This patient was an old lady, who had uterine hemorrhage for many years."

*Medical Lectures the present Season.*—The Lecture Term at the Massachusetts Medical College was commenced in this city last week, with an introductory Lecture by Prof. G. C. Shattuck, which is noticed on another page. A series of clinical lectures for the coming season was commenced at the Bellevue Hospital, New York city, October 19th, with an Introductory Lecture by Dr. J. W. Francis. The lectures are to be weekly through the winter, by the following gentlemen: Profs. Alonzo Clark, B. F. Barker, and J. T. Metcalfe, and Drs. Geo. T. Elliot and James R. Wood.—Prof. St. John delivered on the same day, the Introductory Lecture at the College of Physicians and Surgeons; and Prof. Valentine Mott the one at the University Medical College.—On the evening of the 21st, Prof. J. M. Carnochan delivered the Introductory at the New York Medical College.—The 38th session of lectures at the Medical College of Ohio commenced on the 15th of October; the introductory was delivered by Prof. L. M. Lawson. —*Boston Medical and Surgical Journal.*

*A School of Medicine at Algiers.*—By a decree, dated August 4th of this year, a preparatory school of medicine and pharmacy is to be instituted in Algiers. There will be the usual number of Chairs (eight), and both the civil and military hospitals are to be opened to the pupils for clinical instruction. The school will, as far as examinations are concerned, be in connection with the Faculty of Montpellier; but the diplomas granted in Africa will entitle to practise in the French possessions of that part of the world. To commence medical studies, the young men, be they either Arab or other Mussulmen, must produce a certificate from the director of the Franco-Arabian College as to literary acquirements; the French, from the rector of the Academy of Algiers. There will be no religious restrictions.—*London Lancet.*

*Ergot as a Hæmostatic.*—At the last meeting of the Belmont (O.) Medical Society—as reported in the Western Lancet—Dr. Affleck related a case of labor preceded by severe hemorrhage, in the which the use of ergot operated favorably. He also thinks it one of the best hæmostatics we have in cases of hæmorrhage after the child is born. Dr. H. West had used the ergot to advantage in some cases of hæmorrhage, but had also used it in prior and post hæmorrhages without any apparent effect. Both gentlemen thought it had no abortive effect. Dr. Wierick thought it a good hæmostatic in cases of post delivery where the natural efforts of the uterus were present. He is now using it in a case of passive uterine hæmorrhage, as follows: Ergot, pulv., gr. v.; acetate of lead, gr. ij.; Opium, gr. i., M., three times a day. Dr. S. B. West had great confidence in its hæmostatic virtues. He had used it before and after delivery to arrest hæmorrhage, to expel the placenta, and also as a great hæmostatic.—*Boston Med. and Surg. Jour.*

*New York Academy of Medicine.*—The following, from the New York Times, is reported as part of the proceedings of the November meeting of the Academy. Dr. Van Buren read a report on Dr. Squibb's paper on chloroform, which asserted substantially that an article of chloroform is manufactured in Williamsburg not at all inferior to the best made in Europe. Dr. James, from the Committee on Materia Medica, reported in terms of glowing admiration of Borden's Concentrated Milk. Dr. Garrish presented a carcinomatous liver weighing 8 pounds, from a patient who had died aged 61 years. Dr. Barge read a paper on his improved splint. Dr. Rotton read a compiled paper, and exhibited some of the coca plant so generally chewed by the Peruvian Indians. TheFe llows took a chew all around, but exhibited none of the effects named in the paper, probably for the lack of the quicklime with which the aborigines take it.—*Boston Med. and Surgical Journal.*

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## *On the use of Aconite as a Therapeutic Agent.* By Edward B. Stevens, M. D., Cincinnati.

I wish to give the readers of this Journal my experiencewith the use of *aconite* as a remedy; especially as I find, in conversation with my medical friends, that very many of them do not avail themselves of an agent, that, with me, has proved very efficient and satisfactory.

The aconitum napellus (monkshood—wolfsbane) is represented by writers, with great uniformity, to rank among our most active poisons; thus, in the article on aconite, in Wharton & Stillé's Medical Jurisprudence: "The leaves and root of the aconitum napellus contain one of the most extraordinary and speedy poisons known; and fatal mistakes are recorded from small portions of the leaves or root having been eaten by mistake. Writers also describe the root, seeds, and leaves of the plant as possessing "a hot, acrid taste, giving rise to a burning sensation in the fauces, numbness and tingling in the limbs, swelling and pain in the abdomen, vomiting and purging, accompanied by giddiness, delirium, dimness of sight, and other symptoms indicative of cerebral affection;" and even when simply applied to the cutaneous surface, it is said to produce at first a feeling of heat, which is followed by prickling or tingling sensations, with dumbness.

Although I have directed the use of aconite with comparative frequency, I have not in any case observed such strongly marked manifestations of its therapeutic effect as those which are thus attributed to it; and I am satisfied that, administered *medicinally*, these are exagerated descriptions of its effects.

Another quality attributed to aconite is, that while consciousness may be in no degree impaired, both general and special sensibility will be greatly diminished. Thus, Pereira relates, that under the influence of a full dose, a dog would wag his tail when noticed by his master, and endeavor to follow him around the room, though quite insensible to pinching, or the pricking of a needle.

With such very positive effects upon the nervous system, we should naturally expect this remedy would find a prominent place in the treatment of a large class of neuralgic affections, and diseases of a kindred character. It is, however, somewhat singular, that Baron Storck, who first brought aconite into special notice as a remedy, about one hundred years since, more particularly recommended it in scrofula, dropsy, phthisis, and cancer; and having enjoyed a brief but of course fictitious reputation, for the cure of these formidable diseases, it passed for a time almost entirely out of notice again.

I have found good results from the use of aconite, in almost the entire range of neuralgic affections, and in those obscure complications of rheumatism and neuralgia in which there is freedom from local or constitutional trouble, independent of the nervous derangement; but more particularly in such cases as are usually styled pure neuralgia, I have frequently had results almost as prompt and satisfactory as were recently attributed to valerianate of ammonia.

Something more than a year ago, a lady called upon me for advice, for a severe neuralgia in the face and head. From the history of the case, I supposed it to be a result of previous attacks of miasmatic disease, and accordingly prescribed quinine, which relieved her temporarily, but every few weeks she would have a relapse, and for several days at a time suffer excruciatingly. In addition to the quinine, quite a variety of customary treatment was resorted to, until in November I directed the following prescription; after she had suffered a week, and had tried without avail all the remedies that hitherto had given temporary relief:

℞. Tinct. Aconite *Root*, ʒi.,
Tinct. Cimicifuga, ℥ij.

Sig.—To take a teaspoonful every 4 hours.

My patient took three doses, when she was promptly and entirely relieved; and, what is better, she has scarcely felt a neuralgic twinge since, now about ten months.

In another case, a friend had for a long time suffered a peculiar form of neuralgia, or nuuralgic rheumatism in the arm, which seemed to yield to no remedy, even temporarily. I suggested the aconite. The result was equally prompt with that of the case I have just given. I might multiply these satisfactory examples to considerable extent.

The formula given above is the one I most frequently use in administering the aconite to adults. It will be observed that, given in that way, each dose would be equivalent to about 4 drops of the tincture (except that tinct. aconite gives something more than 60 drops to the drachm;) and in that dose I have never seen any effects sufficiently marked or violent to occasion alarm. It will also be observed, that the tinct. of the *root* is directed. The U. S. Dispensatory recognizes two officinal tinctures: of the *leaves* and of the *root.* I prefer the tinct. of the root, as of greater efficiency, and more reliable as to uniformity of effect. The tinct. cimicifuga is intended chiefly as a vehicle, but selected with the view to its contributing to the special effect of the aconite.

I have not tried the aconite in acute rheumatism, but in the chronic rheumatic pains, particularly such as aged people complain of, I have seen very excellent effects. Neither have I used it much locally, though with many, even those who do not use it internally, it is a favorite topical application.

There is a form of neuralgia, associated with uterine derangement, which I have frequently met with, coming up sometimes in connection with the catamenial period, or immediately subsequent to it, in which there is pain through the hips, sacrum, and uterine region. Sometimes I have seen this group of symptoms succeed abortion. I remember a case of this kind, where the local distress I have just alluded to remained very troublesome for several weeks, while much of the time there was almost uninterupted sleeplessness, despite the free use of opiates. The tinct. aconite root, given through the afternoon and evening, releaved the neuralgic pain, and secured a sweet and refreshing sleep through the night.

I have no explanation to give of the *manner* in which aconite acts therapeutically. I offer the suggestion, however, that its action is directly upon the nervous tissue itself. If this be correct, we should find in some sort a key to the irregular action of remedies in neuralgic affections, and some explanation of the fact, that a remedy gives prompt relief in one group of neuralgic cases, while it is apparently void of all effect in a group apparently similar.

These suggestions as to the use of aconite are not given as by any means original, but simply as confirmatory of old known, but not *practically* known truths. The query is naturally suggested, are there not many other active agents sleeping on our shelves, which, if called into service, would materially contribute to the comfort of our patients, and to our own self-satisfaction. Will not, for example, some patient investigator demonstrate that the gungha, or cannabis indica, is a valuable agent, administered *medicinally*, for something more admirable than the uneanthly intoxication which is its peculiar manifestation.—*Cin. Med. Obsr.*

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# ORIGINAL COMMUNICATIONS.

## ARTICLE I.

*Inflammation and Ulceration of the Cervix Uteri, its Pathology and Treatment.* By V. H. TALIAFERRO, M. D., Atlanta, Geo.

In the present article, it will somewhat facilitate our purpose to notice very briefly some of the anatomical peculiarities of the cervix uteri. The body of the uterus is much more dense and firm than the cervix, from the fact of the absence in the body, of cellular structure, while the neck is rendered soft and elastic by its presence. With this difference, they are alike composed of muscular and mucus tissue. The body of the uterus is sparsely supplied with blood vessels from the smaller branches of the ovarian and uterine arteries, while the neck is abundantly supplied from the larger branches of the same vessels. Thus we see from the greater vascularity of the cervix, the cause of its more frequent liability to disease.

The cervix uteri is freely supplied with nerves from the hypogastric plexuses, spermatic and aortic, which explains its sympathetic relations with various parts of the system, and also its obtunded sensibility to local impressions, its nervous communication being almost exclusively sympathetic.

The mucus membrane which lines the os and canal of the cervix, is thickly studded with mucus follicles.

Now, we at once perceive, from our very brief notice of the anatomical structure of the cervix uteri, its very high degree of organization, and consequently, its susceptibility to disease. The os, in its normal condition, is firmly closed, not admitting very frequently the smallest size probe, while the cervix is smooth and velvety in appearance, its color pale pink, and covered with a slight mucus secretion. To the touch, it is soft and elastic, changing readily its position from pressure. When diseased, the firmly closed os becomes dilated ; the smooth and beautiful pink colored cervix, is changed to livid red from inflammatory action, darkened from congestion, or roughened by ulceration.

Congestion of the cervix uteri supervenes upon the approach of each menstrual period, which subsides with the healthy cessation of the catamenia, leaving the cervix in its normal condition ; but if there be a sudden arrest of the menstrual flow, to which the female is subject from a great variety of causes, we can very readily perceive its liability to take on diseased action, when we remember that congestion invariably precedes inflammatory action, and that although this condition of the cervix is necessary for the establishment of the physiological function of the uterus, it is that very condition which, if interfered with, will very probably establish a diseased process in the organ itself.

Not unfrequently does the female date her first uterine disturbance to the wetting of her feet, the use of cold ablutions, or to some imprudence while menstruating, and we are never surprised that such is the result, for we could not expect a more favorable result than inflammatory action, from the sudden arrest of a secretion from so highly vitalized an organ, consisting as it does, of a net work of blood vessels, and nerves, interwoven into muscular, mucus, and cellular structures.

Under these circumstances, it is a matter of no little surprise that men high in medical authority, should deny the existence of inflammation or ulceration of the cervix uteri, unless as a rare occurrence from extraordinary circumstances.

Notwithstanding the uterus is endowed with a peculiar physiological function, it is not unlike other organs, endowed with the capacity of resisting morbid action. The position of the cervix uteri in the upper extremity, or "cul de sac" of the vagina; its susceptibility during menstrual periods; its highly organized structure; the danger of its abrasion, rupture, &c., during parturition; its excitement from sexual connection, will all bear us out in the affirmation, that the cervix uteri is the subject of very frequent disease.

In the virgin, menstrual derangement is by far the most frequent cause of uterine disease, but with the married female, a variety of causes occur to interfere with the normal conditions of the uterus.

Parturition, as would naturally be inferred, is a frequent source of inflammatory, or ulcerative disease of the cervix uteri.

The violent throes of labor upon the undilated os seems well calculated to lacerate and contuse its delicate lining membrane; and when such a result does occur, the recuperative forces of the system may restore the organ to its normal condition, but if there should exist at the same time constitutional debility, attended with loss of blood, retention of portions of the placenta, or other debilitating causes, an exhausting leucorrhœa will most usually supervene, attended with its host of ailments, such as hysteria, debility, dyspepsia, hepatic disturbance, urinary irritation, constipation, diarrhœa, cephalalgia, palpitation, dysmenorrhœa, menorrhagia, &c.

Sexual connection, when carried to excess, is not unfrequently the source of diseased cervix uteri, especially when there exists an undue susceptibility of the uterine system.

Syphilitic, or gonorrhœal inflammation may extend itself from the vaginal canal to the cervix of the uterus, and produce disease of specific character there.

Now, we can very readily perceive from the variety of opposite causes, which produce uterine disease, the vast importance in the application of treatment, to ascertain the true pathological condition of our patient, and remove, if possible, the original cause of the morbid action.

When disease of the cervix does occur many circumstances operate against the successful employment of treatment, and in consequence, a considerable length of time must be allowed to heal a simple ulcer or slight abrasion.

The position and anatomical stucture of the cervix, with the excitement attendant upon each menstrual period, present important barriers, to the speedy relief of its disease.

Any cause which produces disturbance of the functions of the uterus may produce disease in its structure, and we are well satisfied that a most frequent cause of disturbed menstruation, is constitutional debility. Uterine disease most frequently occurs in females of delicate and debilitated constitutions, and it is no doubt from the fact that with them the menstrual function of the uterus is almost invariably disturbed in such cases. We remember very rarely to have seen chronic inflammatory, or ulcerative disease of the cervix uteri in a female of robust healthy constitution. With these facts it would appear that the state of the constitution is of no minor importance in the treatment of this class of diseases. Whether constitutional debility is the effect or the cause of uterine disease it should demand our most careful attention. The symptoms which lead us to suspect disease of the cervix uteri are both constitutional and local, the most important only of which we shall notice.

As a consequence of the intimate connection of the uterus with the sympathetic nervous system, the disturbance which supervenes upon its disease extends to most of the organs of the system.

The most frequent seat of pain is in the region of the ovaria, in the back and hips, sometimes coursing the lower extremities. Hepatic derangement is not unusual, and may lead the unguarded practitioner to suspect organic disease of the liver. We have seen chronic ulceration of the cervix mistaken and treated for "liver disease."

The disturbance of the gastric function is of frequent occurrence, and may be of such character as very materially to interfere with the assimilative process, and we may have as a result of this disturbance, general debility and anæmia, attended with excessive irritability of the nervous system.

If this state of things is unregarded, our patient may die, not from the extent of the primary disease, but from an extreme state of exhaustion and anæmia, consequent upon continued nervous irritability, and deficient assimilation.

The lungs, the heart, the liver, the stomach, the kidneys, the bladder, are all the subject of derangement from diseased uterus. One symptom, which we look upon as important, and not noticed by standard authors upon uterine diseases, is spasmodic contraction of the abdominal muscles, as an effect of spinal irritation, which is not unfrequently produced by disease of the cervix of the uterus.

The only mention we remember to have seen of this condition of the abdominal muscles, was in an article published in the London Lancet, by E. Headlam Greenhow, M. D., Lecturer at St. Thomas' Hospital, etc., and by several journals republished, upon "Phantom Tumors," in which several cases are reported of apparently distinct tumors, which were ascertained to be muscular contraction, kept up by the irritation of the spine, produced by the uterine disease. These tumors were dispersed upon the removal of the cause.

We have had an opportunity of witnessing a tumor of this character, in which the patient would not be convinced, but that it was a growth within the abdomen of very serious character, notwithstanding that it frequently changed its position was moveable upon pressure, and sometimes altogether absent.

As to the true nature of this tumor we were for a considerable time uncertain, but from its increased enlargement and disturbance upon the approach of the menstrual period, we were satisfied of its connection in some way, with the uterine disease which was present. These tumors are very firm upon pressure, do not increase the measurement of the abdomen, and produce an unpleasant drawing sensation of the part, and are dispersed by relief of the spinal irritation, which has produced them. The writer of the article referred to says, "In considering the history of the cases I have described, it is noticeable that all of them were females, suffering from some disturbance of the uterine function; and that whilst spinal irritation unequivocally existed in three of the patients, its presence may not unfairly be inferred in both the others.

"The real nature of these tumors is spasmodic; their seat probably the abdominal muscles; for although in every instance I have seen, the tumor appeared to be in the abdominal cavity, the melting away of my last case under manipulation, is inconsistent with the belief that they are very deeply seated. The cause is spinal irritation, the irritated spinal nerves producing spasm in the muscles to which they are distributed."

Leucorrhœa is a most frequent attendant upon uterine disease, and depends in quantity and quality upon the extent and character of the malady.

Other symptoms than these may present themselves, but as before remarked, it has been our object to notice only the most important.

From the symptoms and conditions which we have enumerated, we will be led to suspect uterine disease; but the true pathological condition of the uterus can only be ascertained by the aid of the speculum exposing fully to view the cervix. An educated touch will do much in determining the nature of the disease, but can only be auxiliary to the use of the speculum.

When the cervix is brought to view, we at once determine whether there be a departure from its normal condition; and whether there be inflammation, ulceration, abrasion, induration or hypertrophy; its true pathological condition being determined, we have done much towards the accomplishment of our purpose, viz: a cure.

The treatment will, of course, be both constitutional and local, governed, in a great degree, by the character, extent and duration of the disease. The importance of the condition of the constitution of the female laboring under uterine disease, cannot be too highly regarded, provided we are not led to extreme, or exclusive views. Since the importance of local measures for uterine diseases have been fully established, we are too prone to entirely disregard the condition of our patients' constitution, considering that all derangement, no matter how severe, is superinduced by the local disease, to which alone the application of treatment must be directed. In speaking of the causes of disease of the uterus, it will be remembered, that allusion was made to constitutional debility, as a frequent cause of derangement of *the function* of the organ, and as a result of that derangement, inflammatory, or ulcerative disease of the organ itself. When such a cause does exist, the importance of treatment directed to the condition of the constitution, can not be too highly estimated.

Under such circumstances, let us ascertain the remote cause of the disturbance, and if possible, remove it, thereby relieving the general system of its direct and injurious influence, and the uterus of its indirect and hazardous effects. With such a cause existing, do we not at once perceive, that the entire cervix uteri might be consumed by caustics, and still the disease would persist, as a result of the continuance of its original cause.

It will, no doubt, be denied that inflammatory or ulcerative disease of the cervix uteri ever occurs as a result of constitutional debility; but when we remember, that the uterus becomes, monthly, the seat of congestion, and of morbid congestion, unless relieved by an undisturbed performance of its physiological function, we are not surprised at the occurrence of inflammatory action, though it may be, not sthenic, but of such character as that occurring in the lungs in Typhoid fever, as a result of congestion; that congestion being, in our opinion, caused, principally, by the extreme debility which attends the disease in such cases.

As to the greater importance of *either* local or constitutional treatment, we have only to say, that the cause which has produced the disease, the condition, &c., of the patient, both locally and constitutionally, will readily determine the preference of either one or the other, or both plans of treatment.

In very delicate and susceptible nervous temperaments, very alarming prostration may ensue as a result of slight uterine disease, and in such cases, it is very readily perceived, that our efforts should be mainly directed to the restoration of the fast failing powers of life, to the building up of the recuperative forces of the system, and thereby be enabled to call to our assistance all the powers of the "vis medicatrix naturæ," in throwing off from the system the morbid action. We may commence the treatment of disease of the cervix, by exclusively local treatment, supposing the condition and strength of the constitution to be such as not to demand attention; but we should remember that the derangement of the assimilative process, with the continued nervous irritability, which almost invariably attends the disease, is, by degrees, though slow it be, doing its work upon the constitution.

Support, then, to the general system, is of no minor importance in the treatment of this class of diseases. Tone to the digestive aparatus, a healthy assimilative process, should, as far as possible, be maintained by the use of proper diet, tonics, and such means as tend to promote digestion, and give strength and tone to the constitution.

When the strength will admit, the proper kind, and sufficient amount, of exercise should be enjoined as an important feature in the treatment, for upon it will depend to no inconsiderable extent the happy termination of the disease.

The patient should confine herself to bed only when her failing strength compels her, or during the aggravation of her disease consequent upon the excitement of the menstrual periods.

Moderate and frequent exercise in the open air will be beneficial, not only physically, but mentally, by diverting the mind from the nature and seat of disease.

Alteratives, such as Iodide of Iron, Iodide of Mercury, Iodide of Potassium, &c., will, when indicated, be beneficial; but we have less confidence in the internal administration of medicines, than in exercise, diet, bathing, friction to the skin, &c., unless the urgency of symptoms demand, for a time, exclusive attention.

Yet, while we have given so much importance to the treatment and condition of the constitution in uterine diseases, we consider local applications to the cervix itself as vastly essential, for the speedy and permanent establishment of cure.

In inflammation of the neck of the uterus, the application of leeches and counter irritation, with a frequent use of sol. of nitrate of silver will usually suffice; but, if there be in conjunction an ulcer, it should be touched with the solid nitras argenti.

This condition of the neck of the uterus is frequently attended with some degree of hypertrophy or induration, when the application of caustics will be less efficient than Iodine or Mercury; or what is preferable, blistering the cervix as recommended by Dr. Johns, ex-assistant to the Dublin Lying in Hospital, &c. He uses the concentrated sol. of cantharides in sulphuric ether, mixed with the ordinary sol. of gutta percha in chloroform, in proportion of two parts of the former to one of the latter.

We have used this preparation, and find it to be a most efficient application, when the ulceration is attended with any undue congestion or induration.

It will be necessary in the treatment of these diseases, to use in conjunction with the other treatment, vaginal injections, in order to prevent an accumulation of the discharge in the vagina, and about the cervix. Where tenderness and irritability exist, the injection should be of a soothing character.

While we would like to have prolonged our remarks upon this part of the subject, we feel that we have already trespassed upon the space allowed us in the pages of this journal.

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* Half-yearly Abstract of the Medical Sciences.

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*Translated from the Gazette Hebdomidaire, by* W. F. Westmoreland, M. D., Professor of Surgery in the Atlanta Medical College.

## ARTICLE II.

*Upon the cure of Popliteal Aneurisms by digital compression suggestedby the numerous communications to the Society of Surgery.* By A. Verneuil, Agrégé of the Faculty of Paris.

Since the publication of the excellent book of our worthy friend M. Broca, the question of the cure of aneurisms has been under consideration, and compression has regained a preeminence which it should have never lost. Perhaps we may attribute this, to a certain point to the great noise made against operative Surgery. Still, the Society of Surgery, has recently had the good fortune to receive three observations in which aneurisms was cured by digital compression. We recently announced the communication of M. Vanzetti, of Padone; at the same time, the Society received a communication from M. Michaux, of Louvain, containing a similar fact, which without the detail we give below:

M. Vanzetti, who had seen compression employed at Dublin in 1843, thought to replace the mechanical means there employed by the hands of several assistants who were to succeed each other. In 1846 he made an experiment at the hospital of Kharkoff, Russia, in connection with M. Serebriakoff, Surgeon of this hospital. He instructed the aids himself in regard to the place and manner of making the compression. Compression was continued for two days without effect. The ligature was afterwards resorted to.

Seven years later, (1854) received in his wards at Padone, a mason, about thirty-six years old, good constitution, attacked with popliteal aneurism, well characterized, though of ordinary volume. Pulsations ceased in the tumor upon the compression of the femoral artery. M. Vanzetti determined to try compression, but discouraged by the failure above reported, he employed quite a number of modes of compression with much patience and great inconvenience to the patient.

Before ligating the femoral artery, he wished again to try digital compression, in the hope that, under his immediate inspection he would prove more successful. Several aids, seated and standing, sometimes with one hand and sometimes with both, compressed the artery with moderate force, sufficient, however, to bring in contact the walls of the artery, without any inconvenience to the patient. The place selected for the compression was the middle third of the thigh, thus preventing the obliteration of the profundus.

At the expiration of twelve hours, there was considerable abatement in the pulsation of the tumor. At the end of forty-eight hours, the pulsations had entirely ceased, and no sound could be heard; the compression was removed. The cure was perfect. The tumor in the popliteal region gradually disappeared, and the thigh became straight. The patient has resumed his profession; walks without limping, and experiences no uneasiness in the movements of the knee.

The second observation is still more remarkable. In 1855, a very intelligent officer, 75 years old, consulted M. Vanzetti, in regard to a popliteal aneurism of his right leg. Digital compression was resolved upon, but deferred five days, during which time the patient was to use compression himself, the action of which had been explained to him. The tumor which was small, appeared to have diminished under this very imperfect trial.

The treatment proper was commenced at noon, and intrusted to six intelligent and reliable aids. At six o'clock, M. Vanzetti called to see the progress of the treatment, and found the patient in a sound sleep. To the great surprise of the surgeon, not one of the aids were near him. His surprise was still greater when he was informed that after four hours of the most scrupulous compression, the pulsations, as well as the sounds of the tumor, entirely disappeared. The patient remained at the clinic for one month. He was seen several months afterwards by M. Vanzetti. There was no lameness, and the movements of the leg were free and easy. The aneurismal tumor was converted into a hardened mass the size of a hazel nut. Such are the facts communicated by the surgeon of Padone, and which he has exposed with remarkable clearness. M. Marjolau has also communicated two observations, addressed by M. Michaux, of Louvain, one of the most distinguished foreign surgeons.

The first is a long surgical drama, which commenced by double and intermittent compression, and ended with the amputation of the thigh, necessitated by the mortification of the extremity after the ligation of the femoral artery. The patient was cured. This observation is one of great interest, but as it is not directly to the point we wish to discuss, we will not speak longer about it; the details may be read in the bulletins of the Society.

The following is a brief analysis of the second observation. A man fifty years of age, good constitution, having always enjoyed excellent health, complained for the first time in 1854, of rheumatism in the left thigh. In the month of August, 1856, the patient discovered upon the anterior and internal portion of the thigh, a pulsating tumor situated six centimetres below the crural arch. So rapid was its progress, that by the mouth of Nov., its transverse diameter was 14 centimetres, and its vertical 11 centimetres. All the signs of aneurism were well marked. By thorough examination of the patient, a general alteration of the arterial system was evident; abnormal sounds towards the centre of the circulatory system, a rude souffle was heard in all the large arteries. The other functions were normal. What treatment should be employed? If we adopt the ligature, it is necessary to attack the external iliac, an operation always very serious when the vessel is diseased. Upon the other hand, alternate compression with two pads was not compatible with the very elevated position of the tumor. M. Michaux decided to make uniform compression upon the pectineal eminence with the little pad suggested by M. Broca. The treatment was commenced on the morning of the 28th November. The compression was intended to be intermittent, that is to say, every four or five hours, the pad was to be loosened, that the patient might have some repose. The next day acute pain forced him to suspend compression for four hours. On the 30th a blister was observed on the compressed shin; suspension of compression for four hours. The pad was placed a little lower down. The compression in this way was suspended and re-established until the 2d December, when from the presence of phlyctena, it was evident that an eschar had formed.

During the four days of treatment, the pain had been acute, particularly in the loins and heel. Inability to sleep had been complete; notwithstanding the employment of opium, the patient was greatly fatigued; the tumor had diminished in size and had become hard; several times when permanent compression had been continued for four or five hours, the pulsations had disappeared. M. Michaux then thought of digital compression; by good fortune there remained a portion of the skin healthy, where the application of the fingers would arrest the pulsations.

The students of the service commenced the task with the greatest enthusiasm—the 5th of December, at 9½ in the morning—the compression was intended to be total. The pulsations of the arteries were energetic, and a considerable force was necessary to close the vessel. Owing to the eschar, compression was very painful. In the afternoon edema, tingling, numbness, stiffness of the limb. At night there was a continuation of these phenomena, cold feet, inability to sleep, great thirst, violent cholic. But the tumor hardened, pulsations diminished, the sac was filled with clots, the local amelioration continued. At nine o'clock in the morning, twenty hours after the commencement of the digital compression, the pulsations and the souffles completely disappeared. The artery did not pulsate below the aneurism, but above the origin of the femoral, the pulsations were energetic. By prudence the compression was continued until two o'clock in the morning, and was then interrupted half an hour to give some repose to the unhappy patient. It was then commenced again, and continued until nine o'clock in the morning, when it was arrested definitely. I stop my narration here, that I may more vividly impress the mind of the lecturer, and pass under silence the details of the general treatment during that period, as well as that during the convalescence. On the 14th of December the eschar was eliminated; it comprised the whole thickness of the skin. Cicatrization was complete on the 16th of January—on the 24th the patient was completely cured. The aneurismal tumor was very hard, and was yet of considerable volume (five centimetres by seven,) but the cure was perfect. If these were the only remarkable observations we had to report, they would be sufficient to recommend digital compression to the profession. Why object to a mode of treatment which cures popliteal aneurisms in five hours, and an aneurism of considerable size of the femoral artery in twenty-four hours? What would have been the fate of the second patient of M. Michaux but for digital compression?

Let us remark that in both cases, the only resource remaining was the ligature—the insufficiency of mechanical compression having been tried. If M. Broca had have had these facts at his disposition when writing his work, he would certainly have modified the chapter in regard to the mode of operating, which we are discussing. Without following step by step the history of digital compression with our learned friend, we hope we will be permitted to discuss some of the propositions which we find in his book. We too, consider digital compression a very "precious resource." M. Broca regards it as a mode that should be reserved for the following cases: 1st, Where the deviation of the member does not permit us to act upon the artery by mechanical means. 2d, Where the excessive irritability of the skin excludes every other mode of compression. But the last of these conditions existed in one and only one of the three preceding cases; the two other cures is an evidence that the field for digital compression should be enlarged. Besides, if we consult the work of M. Broca, we find another remarkable case, that of M. Greatrex. In this the alternate employment of a compressor and the fingers of the patient arrested the pulsations in the tumor in twenty-four hours. In the case of M. Knight, mechanical compression could not be supported more than an hour, while digital compression upon the pubis suffice to cure the patient in forty-eight hours. To crown all, comes the singular observations of the patient submitted to the care of M. Colles, who cured himself by compressing the artery for seven days—the compression was necessarily very imperfect. It is far from my desire to conceal the rather numerous unsuccessful cases by this manner of treatment. But what do we lose if it does fail? Nothing. It is no more than what may result from mechanical compression; it is certainly less unpleasant to the patient, and may be substituted for it with advantage.

For my part, notwithstanding the increasing perfection of the apparatus for mechanical compression, which M. Broca contends makes it rare to meet with a case where digital compression is indicated, I regard it as he—the ideal of the method —and consequently we should reject it only in extreme cases where there is great difficulty of its application. With M. Michaux it would be with great difficulty that I could be made to believe but that in the majority of cases, a sufficient number of aids could be found to assist in an enterprise so noble and so interesting in a scientific point of view. Up to the present time, digital compression has only been adopted in cases where mechanical compression had been tried. My impression is that we should pursue precisely the opposite course, that when compression is indicated, we should commence by compression with the fingers, before having resource to a method less mild. Perhaps it would not be without interest to scan hastily the cases of aneurism in which digital compression had been employed, either alone or in connection with mechanical compression. The number of cases amount to seventeen—ten of which were successful—seven of which were unsuccessful.

Explanations upon the two categories. *

The unsuccessful cases.

Compression was in four cases primitively employed, that is to say, before any other method. 1. Popliteal aneurism. Compression for two days; ligature, (Vanzetti). 2. Popliteal aneurism, only four hours, afterwards mechanical compression for six days (Jameson). 3. Diffused aneurism of the femoral artery, compression seventy-two hours. Apparent cure which, however, was not permanent. Mechanical compression seven days—radical cure. (Parker). 4. Popliteal aneurism. Digital compression three days by patient. Mechanical compression which before was intolerable, became possible—a cure was obtained. (J. Monro.) Twice it was not employed, until mechanical compression was abandoned. 5. Diffused Popliteal aneurism, sixteen days; mechanical compression, ninety-four hours of digital compression, from which the pulsations and souffle disappeared. Success was not permanent; amputation, death. (Nelaton). 6. Popliteal aneurism. For five days mechanical compression was employed, with an imperfect apparatus. Twenty-four hours of digital compres-

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*We find in the work of M. Broca the details of the above cases. I give here only a very brief analysis designating them by numbers, and the name of the reporter.

sion. Ligature, amputation, cure. (Norgate). 7. In this case both modes of compression were ineffectual, notwithstanding it was an inguinal aneurism. Compression with the fingers was tried for four days and nights. There was great amelioration. The tourniquet was applied, an eschar formed. The external iliac artery was ligated. (Fox). Of these seven unsuccessful cases, the ligature in three cases was afterwards resorted to, (1, 6, 7,) in two cases amputation became necessary, (5, 6,) one of the cases amputated died. Two of the cases in which the artery was ligated, the patients were cured, (1, 7). In three cases (2, 3, 4,) mechanical compression resulted in a radical cure. In two cases, (3, 5,) digital compression, before it was abandoned, had evidently modified the disease. In another (4) it greatly facilitated the cure by rendering mechanical compression tolerable.

Let us now notice the successful cases. Digital compression was employed primarily in two cases. 8. Popliteal aneurism. Cured in five hours, (Vanzetti.) 9. Patient of M. Colles was cured, who cured himself in seven days, of a Popliteal aneurism by intermittent compression, necessarily very imperfect.

In three cases it succeeded when mechanical compression was abandoned, or inapplicable. 10. Femoral aneurism—mechanical compression for four days. The patient was afterwards cured by digital compression for twenty-four hours, (Michaux.) 11. Popliteal aneurism. Different modes of mechanical compression were tried for a length of time and abandoned. Digital compression was successful in forty-eight hours. 12. Mechanical compression was intolerable. A cure was effected in forty hours by digital compression, (Knight.)

In four cases digital compression was employed in combination with the tourniquet.

This mode, which resembles double and alternate compression, has produced such rapid and decisive results, that it would be well to remark this association of forces, which have been so satisfactory, both to the patient and surgeon. 13 Popliteal aneurism. Tourniquet below the groin; the patient making compression upon the pubis with his fingers. Cured at the end of twenty-four hours, (Greatrex.) 14. Popliteal aneurism.

Digital compression over the pubis, alternating with the compression of Dupuytren. They were employed forty-eight hours—cure. 15. The same lesion and the same method of compression. Eighteen hours sufficed for a cure, (Wood.) 16. The following case, treated by M. Tufferell, is much more complicated. In this case we find associated several modes of compression. A very large popliteal aneurism. Belman's plan of compression was used for two days, and was suspended at the expiration of that time, in consequence of the engorgement of the inguinal glands. Digital compression upon the pubis by the patient and one of his friends; tourniquet lower down, alternating with the compression of the fingers for twenty-four hours. The inguinal pad was afterwards applied; cure at the end of seven days.

In the following case, digital compression was employed conjointly and alternately with mechanical compression and direct compression over the tumor; it is consequently difficult to determine the exact action exercised in the cure. 17. Arterio venous aneurism at the bend of the elbow. Direct compression upon the tumor for several days; afterwards indirect compression with the tourniquet, which could not be supported by the patient. Digital compression by the patient himself was next tried alone. Direct compression upon the tumor was again tried with digital compression made by several aids for twenty-four hours, then abandoned. Afterwards compression was confided alone to the patient, and in a few days the aneurism was cured, (Nelaton.)

We should have more than one remark to make upon these interesting cases, and more particularly as regards the point where the fingers should be applied for compression in popliteal aneurism. Perhaps we would adopt the place of election selected by M. Vanzetti, but we have neither time nor space to enter into this discussion.

From the foregoing we can announce without fear of going too far, the following propositions:

1st. In direct digital compression, continued or even intermittent, executed by the hands of reliable aids, or by the p tient himself, is alone sufficient, without any other aid, either before or after, to cure aneurisms.

2nd. In connection with the tourniquet, and alternating with it, has produced the most simple and rapid cures. As a general thing the cure is rapid when this plan is successful.

3d. By this method, aneurisms have been cured, in which mechanical compression has been impracticable or abandoned. It is much better supported than the latter. Digital compression may be applied upon points where the skin is already inflamed.

4th. This mode of compression is the most efficient and the least painful of all; it permits us to respect the nerves and veins near the arteries, acting alone upon the latter; the skin too may be protected. (Broca, page 807.)

5th. Digital compression may fail; but in such cases it most frequently modifies the condition of the aneurism.

6th. There are sufficient reasons to believe that alone it would have more frequently succeeded, if it had been practised with more perseverance and regularity than has been done in the above mentioned cases.

7th. Up to the present day, there has never resulted any accident from this method.

8th. Applied for the first time with success by Laviard, after an operation for aneurism by the ancient method. Indirect digital compression is then essentially of French origin, and it has not been given even at present all the extension and generalization of which in our opinion it is susceptible.

## ARTICLE III.

*Pathology of Hysteria.* By N. B. DREWRY, M. D., of Sharon Grove, Georgia.

Much has been said by those high in authority, within the last century, in regard to the Pathology of Hysteria; and much too, to no purpose—as the subject, even at the present day is far from being settled.

May we have Hysteria in the male, is a question always freely discussed by those who have attempted a solution of the Pathology of this protian disease. Without any intention of entering the list of those who have engaged in the discussion of the vexed question we propose here only a brief report of two cases, which recently came under onr observation, and which support the opinions of those who contend that we may have Hysteria in the male.

Mr. J——, a farmer aged 65 years, short, thick body, large neck and head, scorbutic diathesis, wishing to extend his farm, turned the public highway, which gave offence to his neighbors, and resulted in an appeal to law. Upon being informed of the course his neighbors had adopted, he was stricken down with convulsions, and by his family was supposed to be dying. I was immediately sent for in great haste, and upon my arrival found the convulsions passing off, and he able to talk.

Complained of pain in the nape of the neck, dizziness, distention of the Stomach and Bowels with a sensation as if something passed from the stomach to the throat, and then receded. Uneasiness of the spine with indisposition to keep his bed. Pulse 45 or 50 per minute. He was relieved to a very great extent by Caustic irritation to the spine, Valerian and Quinine with an occasional blue pill.

Soon after this, Mr. J—— learned, that he had gained a suit, in which, there was a considerable amount of property involved, and upon the reception of the intelligence evinced unusual hilarity.

Upon receiving notice of an appeal and a continuation of the suit, he had a second attack, which was more severe than the first. Even now, upon the reception of unpleasant intelligence, he is immediately attacked with this hysterical form of disease.

In October, 1855, I was called to see a gentleman with spare form and delicate constitution. Used tobacco and alcoholic drinks to a considerable extent, the latter, however, not to the extent to produce a decided impression upon the system.—

Found him with great pain in the region of the Stomach, bowels distended. Complained of a peculiar sensation about the throat, as in the above case, which he described as something rising up from the Stomach to the Throat, which nearly suffocated him—a kind of choking. Some uneasiness about the spine—pulse natural—tongue red and fevered. Upon going to sleep is suddenly aroused with muscular contraction, suffocation, &c.

He was relieved by a Cathartic of Calomel and Jalap ; opiates increased the convulsive action. I ordered tonics, farinaceous diet, and alkaline drinks ; forbid the use of tobacco and alcoholic drinks, and his recovery was speedy. The cause of the nervous symptoms was evidently a form of indigestion.

Sometime after this first attack, he resumed the use of tobacco and stimulants, when a partial relapse ensued. To the above, I might add several other similar cases, but as they do not differ in any essential point from the two just related, we have thought it unnecessary to occupy time and space with the detail. In the above two cases, we had the symptoms most prominent in hysterical females. But, shall we call it hysteria ? or should we rather call such afflictions, indigestion, diseased Liver, Stomach, Bowels, &c. &c., with a train of nervous or hysterical symptoms ?

# SELECTIONS.

*Psychology of Acute Rheumatism.* By ALBERT T. WHEELOCK, A. M., M. D., Author of Boylston Prize Essay for 1838, &c., Belfast, Maine.

This title is selected, because it is as convenient as any other, for the purpose of an *exposé* of the *mental and moral conditions* connected with the access of acute rheumatism.

American physicians, as a class, have given comparatively little attention to the means of preventing disease, and to hygiene, or the moral, mental, and physical methods of cure apart from the use of medicine. Eminently an inventive people, may we not justly expect very important improvements here, in consequence of this especial characteristic. The result may be to lessen the number of physicians needed by the community. There may be less medicine purchased and used. Truth, nevertheless, in this country of all countries in the world, is never to be feared. The physiological knowledge, now in the wide practical diffusion, is mainly, of course, due to the researches of scientific medical inquiry. The race is already improved, and is being more so, at the present time, from the same cause; how far these inquiries are to extend and the consequent improvements to continue, we can judge only from analogies. What more noble and philanthropic, then, than to lead one's exertions to still farther multiply this kind of truth, resting quite assured that what will benefit the masses will enure to universal mutual benefit.

To prevent disease, it may, of course, be generally necessary that the cause be understood. Not that many of the causes of contagious diseases may be removed in the present state of society,—such, for example, as rubeola, parotitis, scarlatina,—the direct cause being a proximity to the affected; the result, a disease of the like kind with that of the previously afflicted person.

From an improved medical science, the causes of all diseases *may* be as well understood as is now the producing cause in well-known contagious maladies; that is, the *rationale* of the production of any given disease may be discovered, simpply and thoroughly explained, and demonstrated.

For the last hundred years no definite improvement has been made in this regard. Indeed, is the cause of any of the inflammatory diseases settled upon sufficient and thorough observation, so that no farther proof is called for to satisfy a philosophical observer? Is there not a multitude of causes laid down with more or less indefiniteness, to which is ascribed the production of any one of these diseases? Is not our information unsatisfactory, when compared to a definite, mathematical, and invariable statement of the cause?

A definite cause discovered directly producing any one of these diseases, affords a valuable stand-point from which to make similar discoveries. At least it affords encouragement that may lead to like observations in regard to some other disease.

Needful observations, careful, definite, and intelligent, from the peculiar nature of such inquiries, are not easily made, so many circumstances, such as varieties of climate, varieties of constitution, hereditary or acquired, are to come into account. There is this consolation, however, for those who would make such observations, that there are at this time a large number, and that number constantly increasing, who will understand and appreciate; and that superficial inquiries, based on ill-considered or too small a number of facts, or, in reality, on none at all but visionary ones, do not long hold competition with them; that the time is gone by when mere theories plausibly maintained are to be received as of equal value with opinions based upon facts and laborious investigations.

The materials in reference to the disease named at the beginning of this article, collected during a period of twenty years of professional experience, consist of observations of fifty-four cases of acute rheumatism. The patients were sufficiently intelligent, and the inquiries, new to them as well as to the other attendants, were, no doubt, altogether unexpected, but at once understood, and their propriety and pertinency admitted; all these inquiries and statements became confirmatory of a principal truth, viz.:

EVERY ACCESS OF ACUTE RHEUMATISM IS IMMEDIATELY PRECEDED BY A SPECIAL MENTAL CONDITION

Nothing of the kind has been, to my knowledge, laid down by any of the medical writers of England or America; and during the past season an opportunity was afforded to make personal inquiries of several leading physicians in Paris, who, with unanimity, confirmed my previous belief, that nothing like it had been recorded by the best-known writers of France or Germany. The medical opinion, based on the accompanying facts, was then written by me in the French language, and published under the auspices of the Minister of Public Instruction.

The theory is, that cold and mental agitation produce acute rheumatism.

The cases given, selected not entirely at random, but to show the production of the disease in various aspects, were well marked, attended by fever at the outset, followed by extreme muscular prostration, and continued generally several months.

Obs. I.—G. P., mechanic, age 19, an orphan, had, by several years of industry, saved a few hundred dollars, which he had lent to a friend in mercantile business. On learning that he was likely to lose his hardly-acquired fortune, which was his all, as far as money was concerned, was very anxious respecting it, both by fear of losing it and in devising means in regard to it, so much so as to have remained without sleep or appetite for several days successively. During the period passed in this manner, by some neglect, he became exposed to a sudden suppression of the perspiration by cold. A severe attack of rheumatism immediately came on, attended by violent pain in several parts of the body, and by extreme muscular prostration; disease continuing several months.

Obs. II.—W. A. O., aged 40, unmarried, while on a voyage from Liverpool to Boston, the latter part of the winter season, was in a gale of wind for fifteen days, and during the whole of that time constantly apprehending serious injury to the ship, or a complete and fatal shipwreck. He had made his own fortune, had always been heretofore successful, and was a large owner in the ship. During the first days of this stormy period he was much exposed to the weather, and of course very anxious concerning the present situation of himself and crew. At this time he experienced a severe cold, and a few days after was prostrated by an attack of acute rheumatism. On arrival in port, being removed to the hospital, he remained some months there, and, on discharge, continued incapable for business several months thereafter: finally, complete recovery.

Obs. III.—C. A., aged 25, had an intimacy with a near relative, and she had become pregnant by him. Both were well known to a large circle of acquaintance, and in a situation rendering the consequences likely to be publicly exposed. Planning various methods of concealment, and attempting to carry them into execution, under the greatest mental excitement and anxiety, he became exposed to severe cold, rapidly followed by an attack of acute rheumatism, the more serious effects of which lasted several months.

Obs. IV.—E. T., nurse, aged 30, unmarried, of much valuable experience in her present vocation, was to attend her sister during her approaching confinement, generally unusually critical. Learning by telegraph that her sister had been confined prematurely, she was exceedingly anxious to obtain an immediate conveyance to her. While under this mental excitement, making unaccustomed exertions to succeed in her object, neglecting usual precautions, she experienced a sudden suppression of the perspiration by cold, and suffered a most severe attack of rheumatism; was in the greatest agony of pain for several days, soon followed by extreme prostration.

Obs. V.—B. A., clergyman, aged 40, married, nervous sanguine temperament, bilious habit, of unusually social disposition, happy in his domestic relations, accomplished in education, lost, by sudden death, an only child, a son of eight years. The affliction produced nervous excitement, amounting to partial insanity. While attending to some customary manual labor and exercise, during this mental disturbance, he became wet in a shower of rain, and, neglecting precautions, experienced a severe cold. Rheumatism succeeded, attended with extreme mental and bodily prostration for some months.

Obs. VI.—J. K., farmer, aged 20, married, living in a newly-settled district, clearing up his land in the forest and making a farm, was laboring every day in the week to have his crops sown in suitable season. Having conscientious scruples against working on the Sabbath, he suffered much anxiety and self-reproach on that account. During this time, severe cold, in consequence of the negligence, produced by his distracted state of thoughts, preceded an attack of rheumatism of five months' duration.

Obs. VII.—M. C., merchant, aged 35, married, contracted gonorrhœa from a woman of the town. While suffering anxiety of mind, in much fear of the discovery of his faithlessness by his wife and friends, and attending to customary employment, by some neglect he experienced a severe cold, which was immediately succeeded by an access of acute rheumatism of several months' continuance.

Obs. VIII.—G. B. M., medical student, aged 23, was candidate for house-physician to a hospital, which position was to be the consequence of successful oral examination and thesis. Being embarrassed pecuniarily, he much desired the situation, and also because he considered it honorable under the circumstances. He was for six months engaged in preparing the dissertation. As the examination approached, he exerted himself very laboriously in his studies, and had much anxiety in regard to the result. Succeeding some active physical exertions, he suffered a sudden diminution of the vital heat of the body by cold, which was immediately followed by a lengthened attack of acute rheumatism, several partial returns of which were subsequently experienced.

Obs. IX.—C. H., a jeweler, aged 26, had pursued his occupation successfully for two years in a new and flourishing city, when, being obliged to vacate his premises in consequence of the sale of the building, he found much difficulty in obtaining another. He spent several days unsuccessfully in inquiring about the place for that object. He was of a somewhat delicate habit physically, made more so by sedentary employment within doors; and while exerting himself in this unusual manner, being much depressed and anxious at the time, he became exposed to sudden cold, the consequence being an access of acute rheumatism, which recurred at several subsequent periods of his life.

Obs. X.—J. R., female, married, aged 29, of an amiable and affectionate disposition, temperament nervous, of unusual sensibility, had been for two or three weeks making preparations for an entertainment of numerous friends at her house, in a place where little assistance of the kind required could be obtained conveniently. As might be expected in a person of such characteristics, she was quite anxious that everything should pass off to entire satisfaction, and, during the evening of the entertainment, was exposed to a strong draft of air while receiving her guests as they successively arrived through the opened doors. During the evening she was able to attend to the duties as hostess; the following day commenced an attack of rheumatism, the disease continuing through the period of four months.

Obs. XI.—B. W., a young professional man, aged 24, had an urgent engagement several miles from his residence, and was unjustly disappointed in his expected means of conveyance thither. While very much vexed, and anxious about the consequences of his delay, he went hurriedly to seek another conveyance about the town, and obtaining a private carriage, he jumped into it in a state of high perspiration and drove rapidly off. The next day was the commencement of a severe and lengthened rheumatic attack, the case being attended with the usual pain, and physical and mental prostration.

Observations similar to the preceding, five times in number, made in a series of years, affording no exception against the proposition above enunciated, its converse also being equally found true, that no case of rheumatism has been observed not traceable to a special mental disturbance previous, have settled indubitably, in my opinion, the connection between the phenomena described the disease, acute rheumatism.

What, then, is one of the most important indications in treatment? It is, of course, to bring into operation the requisite moral influences. The patient is to be made to understand the true nature of the disease and its cause; a reaction is very frequently produced thus, at the discovery and belief that the disease has been partly or entirely brought on by indulgence in mental anxiety, which, to say the least, may not be necessary, and may and frequently should be avoided. It cannot be expected that every individual shall exercise the philosophical calmness requisite to forgetting or ignoring mental agitation; but from the nature of the case, it may be presumable that a knowledge of the really producing cause of the disease will greatly assist in fortifying the sufferer against a protracted continuance of it. In my own experience of its treatment, I have found that when patients are informed that it has been brought on themselves by a mental agitation, that might seem to be avoidable or inexcusable and needless, the disease has been shortened in its course or immediately stopped; and in cases where there have been successive attacks, on the patient being informed of their nature and cause, he has apparently been thus spared these recurring attacks.

The preceding inquiries are no doubt in the true spirit of the medical profession, which ranks the means of preventing disease, or lessening its violence among its most important discoveries. If there is less confidence in specifics; if there is more known of the deleterious effects of some kinds of medication; if the number of diseases found to be uncontrolled by medicine, is an increasing catalogue, it is owing to conscientious and carefully noted observations by the faculty. Vaccination, the forestalling of dyspepsia, the principles and necessity of ventilation, may be proudly signalized as benefits which, however properly appreciated, have never been recompensed by the vulgar, who suppose all motives to end in the expectation of pecuniary reward. This kind of information by the press, and by individual advice to patients, is being more and more diffused, till all these subjects, so intimately connected with happiness, are more understood; and the people, by avoiding many errors already known, are learning that the beautiful, are one and the same: that perfection of form even is to follow mental and moral perfection, till a new trinity of beauty, love, and worship is to be added to the sublime dogmas of received revelation, in the new Evangel of health. —*N. Y. Chirurg. Review.*

# *The Progressive Development of Physiological Ideas.*

Read before the Detroit Medical Society by E. P. Christian, M. D., and published by request.

The birth of ideas originating the discovery of new laws in the economy of nature, and of their application in explaining and interpreting the various and manifold natural phenomena, or the application of natural forces, science and the arts, is not like that of the fabled goddess Minerva, springing full formed and of perfect development into life from the head of Jove, except in the manner expressed in this alligory, representing wisdom emanating from the head of the Supreme Governor and Ruler of the Universe—the Omniscient Divinity from whom all knowledge proceeds.

Occasionally the world furnishes examples of intellects of that acuteness and capacity for observation and ingenious deduction, who seize upon the embryonic ideas of their predecessors, and bring forth such admirable order and system from chaotic confusion that the advances they make seem like the discovery and complete development of new and unheard of laws.

The idea of the application of steam as a motive force underwent a gestation of ages before its development and birth into the steam engine; and so too the electric telegraph was the product of the gradual growth of ideas concived e'er yet Franklin received his message from the clouds.

This fact of the progressive development of great ideas is sufficiently exemplified by what is of common observation, that new discoveries are seldom without competing claimants for the credit of priority.

The study of the history of the development of those ideas which have led to the elucidation of new principles, the explanation of mysterious phenomena or new application in the arts, will prove both an interesting and profitable pursuit. By this means only shall we be capable of judging of the boasted progress of successive ages over the preceding, and in particular of the vain-glorious claims of our own age to pre-eminence over all that has preceded. And so too shall we be enabled to render due credit to the fameworthy labors of older writers, as we shall learn that what appears but the pale flickering light sending dimly back its rays is only rendered so by its distance from the beholder, or perhaps by the denseness of the surrounding fog through which the glimmering of its rays is seen.

Young Physic, a zealous student of modern medical literaure, both in its teeming periodicals and the more ponderous volumes daily emanating from the press, and familiar with modern discoveries and improvements, is inclined to irreverence for what presents the mustiness of age; but an equal familiarity with more ancient literature would often shew him how the fire which burns so brilliantly for him, was lighted years before, and its flames kept shining by continual addition of fuel by successive watchers.

Old Fogy Physic too, remembering the proud advances in science of his younger days, not seldom permits his inertia the satisfaction of a neglect of study of more recent writings, and thus perhaps fails to see by what process the flickering taper of former years has gradually given place to the brilliant carbo-hydrogen illuminators.

Each discovery is the result of the progressive developments of some principle, and is dependent upon preceding developments of the same; and so too, each discovery opens new indications to still farther truths.

In no department of science has this truth been more distinctly shewn than in physiology, and in nothing pertaining to the human body is it more impressively manifested, "how fearfully and wonderfully made is man," than in the physiology of the nervous system. What wonderful mechanism and design is there displayed, and what startling, mysterious phenomena, that were wont of old to be charged to demoniac influence, have been shown to depend upon the influence of this system.

But marvelous as have been the developments of science here, still greater mysteries will yet be explained, and future discoveries will prove that our age was but the infancy of nervous physiology.

Here, however, on this dark, uncertain subject we are to bear in mind especially, that hypothesis merely, howsoever specious, is not discovery, if it lack demonstrative proof. Credit nevertheless is due to those whose foresight has enabled them to perceive what has remained for more fortunate ones to demonstrate; but how often is it that theories have been broached as new, and great discoveries heralded, when a more familiar acquaintance with medical literature would have shown the same to have been conceived and given birth to by others. Not often, however, is it that competing claimants arise for the credit of such so called discoveries, and when such is the case, that numerous contestants enter the ring, this fact is of itself sufficient to prove the fallacy of any exclusive claim, and to indicate that the idea was a common one.

Such a contest is now exhibited by the parties claiming priority in the discovery and designation of what is styled *excito secretory system of nerves*.

Our design in this paper is to trace up the development of this asserted new discovery, and to show what these rampant partisans are entitled to, and how much has been borrowed from older authors on the physiology of the nervous system. For this purpose a clear understanding of the nature of these claims will be necessary.

Dr. H. F. Campbell, of Georgia, claims the idea and designation of an excito-secretory action, prior to Dr. Marshall Hall. This claim is acknowledged valid by Dr. M. Hall, who however, awards the credit of antecedent demonstration of facts in proof of this doctrine to M. Bernard. Dr. J. Adams Allen, of Michigan, contests the claim to priority of discovery with Dr. Campbell, and Dr. M. Paine, of New York, asserts vigorously his claims to having anticipated each and all the others.

We may perhaps better show the nature of the contest by quoting the claims of the interested parties.

"Dr. Campbell," says Marshall Hall, "is entitled to the idea and designation of an excito-secretory action, but his details are limited to pathology and observation."

That "the idea of the excito-secretory function, as applied to pathology, is indisputably his; he first detected, gave it its designation and saw its vast importance."

"My own claim," says he, "consists in the vast generalization of excito-secretory action throughout the system."

"The elaborate experimental demonstration of reflex-excito-secretory action is the result of the experimental labors of M. Claude Bernard."

Dr. Allen claims "the great generalization that the excito-influence is followed by a reflex change, in which the effect is not a motion, but a modification of vascular and nutrient action. That this effect takes place by means of the double nervous arc.""

He remarks, "as Mr. Hall is kind enough to allow Dr. Campbell the credit of having discovered the excito-secretory function, "as applied to pathology," perhaps he may be led to recognise my own claim to the discovery of this principle, as applied to therapeutics. I shall not be content with this," &c.

He then quotes from his old manuscript lecture which is adduced in proof of the priority of his discovery, as follows:

"Hence the impression must be transmitted to the nervous centres, and thence reflected to the affected organ; in other words, the influence is primarily exerted upon the cerebro-spinal system, and secondarily upon the internal affected organ."

Dr. Paine claims, that the whole of this doctrine contained in the first extract from Dr. Allen "is impressed upon the medical and physiological commentaries, (of which he was the author,) and upon half the pages of these Institutes (of Medicine), and has always been taught extensively in the Author's lectures since 1841."

And again of the second quotation from Dr. Allen, in regard to the application of the principle to therapeutics and his explanation of the modus operandi of medicines, Dr. Paine remaks as follows:

"Here also the whole of the foregoing doctrine appears throughout these Institutes, but they embrace a long chapter particularly upon "counter-irritation," in which it will be seen that the author has employed nearly the foregoing language of Dr. Allen and with a great elaboration and extensive application of the doctrine throughout the work, which had been also antecedently taught in his lectures for seven consecutive years before Dr. Allen promulgated his views. He enforces everywhere the doctrine that reflex action of the nervous power is the modifying cause through which all changes are effected by morbific and remedial agent in parts that are not immediately connected with the direct seat of their action," &c.

And again says Dr. Paine: "As to M. Bernard, his experiments bearing upon the connection of the nerves with the function of secretion, however much they may have been varied and multiplied, were anticipated long before by those of A. W. P. Phillip, which are quoted extensively in these Institutes."

Here then is an amusing contention; and what does it indicate, but, as has been before said, that the principle laid claim to by these contestants has been no hidden thing—may be traced as far back as the experiments of Phillip above referred to? This is, indeed, the whole discovery. There has been no new system discovered. No one professes to point out the newest fibre, ramification or ganglion. It is then merely the discovery of a function, and these modern claimants do not even point out the channel of this communication. They do not tell us what system is the medium of this newly discovered force. What then does this mean? If they cannot tell us by what system this function is performed, and give us some plausible demonstration, what does this whole theory amount to but baseles, hypothesis? But if they leave us to infer, as we must, that the function is performed through the medium of the nerves of organic life, do they not do so because it is an admitted fact in physiology of the presidence of the great sympathetic over the organic viscera; and where then is the discovery? We have admitted such a function to this nerve before. Dr. Campbell, indeed we may infer from the tenor of his very excellent report on the nature of Typhoid Fevers, in the Vol. of Transaction of the American Medical Association for 1853, places the seat of this function in this system of nerves.

This idea then we have claimed is as old as the experiments of Phillip, and we shall attempt to show that it may be definitely traced up to Bichat, and may be found more distinctly enunciated by Broussais, and unequivocally so by subsequent writers. Probably there is not a gray haired man in the profession, but who recognizes in these ideas the familiar doctrines of older writers; and within the writer's own knowledge the elaboration of this very same principle, as applied to the pathology of malarious fever, was contained in a thesis by one of our own members, more than a score of years since. Indeed, the very idea is involved in the terms made use of by the older writers, and which have also been copied by modern ones, as "sympathy," and the "great sympathetic," and "nerves of organic life."

Let us see then, if we can furnish any evidence to justify us in these statements.

Even as old a writer as Bichat had at least a faint perception of this truth; and the germ of the whole theory is developed in his attempt to prove that "the passions regulate the actions of animal life though they have their seat in organic life." Imbued, as he was, with the materialistic ideas of French philosophy which prevailed in the days of the Republic, he seeks to reconcile his physiology with his moral philosophy. Attempting to separate the organic functions from the direct nervous influence of the brain, he regards each ganglion a separate and independent nervous centre, presiding over those organs to which its emerging fibres are distributed. And observing the influence of the passions and emotions on these functions, he attempts to prove from thence their seat and origin in these centres; yet he is necessitated to acknowledge, that "numerous sympathetic relations unite all the internal viscera with the brain or its different parts. Every day's experience (says he) affords us examples of affections of this organ arising sympatheticallly from those of the stomach, liver, intestines, spleen, &c. This being premised, as the effect of every kind of passion is to produce an affection, a change of force, in some one of these viscera, it will also excite sympathetically either the brain wholly, or only some of its parts, whose reaction on the muscles which receive it from the nerves, will produce in them those motions which we observe."—*Phys. Researches on Life and Death, pub.* 1809, *p.* 54.

Here, then, we have unequivocally the theory of excito-motory and reflex action, which, as we shall see, is the parent of this theory.

But again, says he, "Perhaps the internal organs do not act upon the voluntary muscles by the intermediate excitement of the brain, but by direct nervous communications; how they act is of no consequence, * * what is most essential, is the fact itself; what is evidently in support of it, is, on the one part, the affection of an internal organ by the passions; on the other part the determinate motion to this affection in muscles, over which this organ has no influence in the ordinary series of phenomena," &c.—*Ibid.*, *p.* 55.

"It is from the affection, and not from the cause which produces it that sympathy arises."—p. 55.

It is not only in the brain, but on every other part, that the viscera affected by the passions exercise their sympathetic influence," *&c.*—p. 56.

Thus much then, from Bichat, one of the brightest lights of medical literature, who was prevented only by his false metaphysics, in placing the origin of the passions, emotions *&c.*, in the sympathetic ganglions, the necessary result of his peculiar infidelity, from anticipating the glory of succeeding physiologists.

We will next refer to the writings of Broussais, and select the following extracts:

"It is proved that the nerves coming from the brain are the channel for the sensations, which, from various parts of the body, go to the center of perception and volition; that is to say, the influences under which the latter determines movements. These two phenomena which constitute *innervation* are, on final analysis, but modes of general irritation.

The cords of the great sympathetic are continuous with the cerebral nerves, and are to be considered like these latter, as conductors of irritation. This granted, it must, of necessity, follow that irritations which are developed in the viscera, where the great sympathetic predominates, should be communicated to the cerebral nerves, and by them conducted to the encephalic center.

It is also, equally indispensable to admit that the irritations of volitions emanating from the brain should be carried into the ganglionic nerves, and penetrate by means of these latter into the tissues in which these nerves are distributed.

There is then, reciprocity of stimulation between the encephalic and ganglionic nerves; that is to say they serve as excitors of each other."—*Broussais' Physiology*, 1832, *p.* 261.

Again, "Sometimes excessive pains, even of external parts to which the great sympathetic does not extend, such as of the skin, and the articulations, determines an involuntary agitation, and may even go so far as to excite delirium, as I have seen in a most violent case of arthritis."

"To this I would reply that, all the perceptions being as I have proved, reflected from the brain to the viscera, the irritation caused by an excessive pain must be transmitted to the great sympathetic," &c., &c.—*Ibid*, *p.* 262.

"The cords of this nerve which plunge into the large secretors annexed to the hollow organs, as the salivary gland the pancreas and the liver, must associate the secretions on the one side, with the mucous membrane of the alimentary canal, and on the other, with the brain," &c., &c.—*Ibid. p.* 268.

" The encephalic nerves establish relations with external bodies, and preside over the grander movements, as those of the muscular masses for locomotion.

" The great sympathetic establishes in the interior of the body, relations between the viscera, and regulates their pasricular movements. For the exercise of this function, it borrows stimulation from the encephalon, and transmits some to it at need."

" The great sympathetic receives stimulation from the cerebral nerves, which are themselves indebted for it to the action of external bodies, and make use of it to bring into play the cephalo-splanchnic and splanchnic muscles, and the coats of the arteries," &c., &c.--- *Ibid, p.* 272.

Mark that! Do not the above extracts, and particularly the last two contain a very clear enunciation of not only the excito-motory, but also of the excito-secretory function; and this too, even before the full elaborate demonstrative experiments of Sir Charles Bell, which established as an admitted truth the fact of the existence of the two sets of nerves in the spinal column. But even in this we are anticipating. The work in which these doctrines are enunciated was given to the world about 1832.—Bichat's work had preceded by a score of years—and now by going back, even anterior to Broussais, we shall find clear expressions given to the idea involved in this theory. Thus the following extract from Pereira in regard to the experiments of Sir Benj. Brodie, published in 1811–12.

" It has been generally supposed that there were two modes by which medicines or poisons affected remote parts; these were absorption or the passage of medicinal or poisonous molecules into the blood, and by sympathy, or by an impression transmitted through the nerves."—*Pereira, Mat. Med., v* 1, *p.* 148.

And says the same author, Messrs. Morgan and Addison advocated the operation of medicines by sympathy as early as 1849.

It was about the same time from 1834 to 1836, that Sir Charles Bell was engaged on his demonstration of the double set of nerves, the sensitive and motor, and only two years subsequent to the last date, in 1838, that Marshall Hall announced his excito-motor theory; naturally arising from the demonstrations of Sir Charles Bell, and which in fact we may regard as a modification, or perhaps an elaboration of it, as no other system of nerves is demonstrated; but the function only. For of the existence of other sets of nerves distinct from those of Sir Charles Bell, there is no positive anatomical proof, the only proof, consisting in the fact that, on the hypothesis of the existence of this system of nerves could otherwise inexplicable physiological phenomena be plausibly explained. And in truth, this was a plausible hypothesis bearing at one time almost the force of demonstration. But at this time other hypotheses are advanced furnishing an equally plausible explanation of these phenomena—thus, the hypothesis being adopted by Todd and Bowman, and which indeed, appears to be the most simple and philosophical explanation, "that the mechanism of a mental and physical nervous action are essentially the same, differing only in the nature and mode of application of the stimulus. The same afferent and efferent fibres are exerted in the one case as in the other; the former acting as sensitive or excitor, or both; and the latter as channels for *voluntary emotional*, or strictly physical impulses to motion."

Such was the discovery of Marshall Hall, heralded as the great discovery of the age, which has immortalized his name, like others of his leading ideas, simply by the noise in proclaiming them, and the zeal and steadfastness of purpose in making them popular, and urging their importance.

Again we will quote from Pereira; "The agents whose operation is of the kind here referred to, (electricity, heat, cold, light, mechanical irritants, corrosives, &c.,) affect remote parts by the agency of the true spinal and ganglionic system. The mode of action of those which act through the true spinal system is excited and reflex, that is, an impression is made on and caried by the incident excitor nerves to the nervous center, which, by its peculiar power, affects a remote part through the medium of its reflex motor nerves."

"The mode of operation of those agents which act through the ganglionic system is excited, and may, perhaps, also be reflex.—*Pereira, a.* 1. *p*. 163.

If this be not an explanation of the excito-secretory theory, applied to therapeutics, we greatly misapprehend what is claimed.

We have thus traced up the development and modifications of his idea, from the time of Bichat We would not detract from the merit which attaches to each of these modern claimants for their elaboration and application of the truth, each in his own separate way—but we do claim that the merit of originality in the advocating the hypothesis, or in practical demonstration of the principle, can be exclusively yielded to none of them, and that a just adjudication would restore the glory to older authors, which is in danger of being snatched from them.—*Peninsular Journal of Medicine.*

# *Artificial Rupture of the Amniotic Sac during Labour. Objections to the Practice*

By B. F. Richardson, M. D., Adjunct Professor of Obstetrics and Diseases of Women and Children, in the Medical College of Ohio.

In the last number of this Journal, quotations were made from numerous standard obstetrical authorities, which, directly and by fair implication embody the doctrine, that the amniotic sac is the only proper and efficient agent in the production of diltation of the os uteri; that after it is well dilated, or dilatable, there remain no important objections to rupturing the membranes; and that, therefore, it is undesirable to maintain the integrity of the amniotic sac beyond that period. At the conclusion of that article we promised to show, "that one of its most important uses remains unfulfilled until the presenting part has passed through the superior strait; and that in all natural, uncomplicated labors, especially primpara, the membranes should not be ruptured at any time."

If this proposition can be sustained by argument and numerous facts, the inference is patent, that the views entertained and inculcated by obstetrical writers generally, in regard to the office and treatment of the amniotic sac, are well calculated to seriously mislead those who exercise their memory more than their reason. He who conceives of no objection to the rupturing of the membranes after the os uteri is well dilated, will, almost certainly, rupture them, in expectation of exciting more vigorous uterine contractions.

Perhaps, on no other point connected with obstetrics has there been so much misinterpretation of facts, assumptive reasoning, and erroneous conclusions, on the part of writers, as in regard to the mechanism and phenomena of the first stage of labor. As the views entertained by Professor Murphy on this point are in accordance with those of most writers, and he has elaborated the argument through which these views have generally been derived; a review of his positions will be appropriate, in the course of my remarks.

Is the amniotic sac the only proper and efficient agent in the production of dilatation of the os uteri?

Are there any important objections to rupturing the membranes after complete dilitation of the os uteri has taken place?

The discussion of these questions will embody the answer to the first: Is it desirable to maintain the integrity of the amniotic sac during labor?

Prof. Dewees, by an ingenious argument, attempts to show that, ordinarily, the amniotic sac has nothing to do in the production of dilatation;

but unfortunately he admits, in part, that which he undertakes to disprove, and moreover is guilty of palpable inconsistency. At the conclusion of paragraph 515 he writes: "but in this admission, let it be recollected that I consider the waters as useful by their equal pressure upon the lower part of the uterus, and by distending, and at the same time, by the same agency, weakening the circular fibres of the part, and thus indirectly favoring the dilatation of the mouth of the uterus." Now turn to paragraph 518. "When the os uteri does dilate, it is not by edges being stretched mechanically; it is an absolute inability in the circular fibres to maintain a state of contraction, and for the time being, may be considered as paralyzed, or excessively fatigued; or, perhaps, more properly speaking, it is the relaxation of a sphincter not subject to the control of the will." Where a proposition is faulty, the reasoning is apt to be illogical. This gifted and lamented author was endowed with a spirit of controversy to an extent that sometimes led him into the adoption and support of views, which his acknowledged powers of argumentation were insufficient to sustain. However, in attempting to exclude entirely, the amniotic sac as a usual participant in the dilatation of the os uteri, he assumed a task perhaps not more difficult than that of Prof. Murphy, who undertakes to demonstrate that it is the only proper and efficient dilating agent.

We have heretofore stated that the argument and assumption of Prof. Murphy involve "a total disregard of well known hydrostatic and mechanical laws: and that he takes the position "that the amniotic sac is a better dilater of the os, than the smooth, round and comparatively unyielding vertex." At page 55, commenting upon the argument of Dewees, he remarks: "It would make the membranes not only useless as a means of dilatation, but rather a difficulty in its accomplishment. The head of the child, directly applied to the cervix, would overcome the resistance of the circular fibres much more efficiently than the liquor amnii, so that the most favorable kind of dilatation would be that which occurs when the membranes are ruptured at the commencement of labor. It is very well known that this does not happen;" and after giving Dewees' explanation of the difficulty, proceeds: "But in place of the waters, there is the large, round, and unyielding head of the child forced down upon the lower part of the uterus, which one would suppose more efficient for the purposes of mechanical distension." According to the opinion of Dewees, and not his own, as we may fairly infer. Again, at page 50, "If the uterus exerted its full power upon the undilated os uteri, and if the unyielding head of the child were driven forcibly against it, the almost certain consequence would be, that the irritation would excite increased resistance, and ultimately terminate in inflammation of the mouth of the uterus. To obviate such an effect, nature interposes a *fluid medium* between the power and the resistance. The liquor amnii contained within the membranes, occupies the cavity of the uterus, and when its parietes contract upon it, the force exerted is (as we have explained) by this means, accurately conveyed to the os uteri. When the latter dilates in the slightest degree, the fluid insinuates itself within the smallest opening, and expands it by a direct lateral pressure against its edges. The power of the uterus is thus made to act in the most favorable manner for distending its mouth."

On same page he says: "Further, so long as the tissue of the uterus intervenes, it is necessary to moderate the great power which the uterus is capable of exercising to dilate it: this is effected by the liquor amnii." Again, on page 108: "The gradual escape of the liquor amnii also gives rise to tediousness. If this takes place when the os uteri is slightly dilated, in other words, when the latter is so long exposed to the head of the child as to become irritated by it, the result is rigidity of the os uteri, etc." On page 55 we also read: "If they are ruptured when the dilatation is very slight, the suddenly increased power of the fundus, forcing the head of the child against the os tincæ, soon excites irritation, prevents its expansion, and sometimes causes inflammation. But if they are broken when the uterus is sufficiently open to allow the membranes to protrude into the vagina, and the contractions of the fundus to increase, it is probable that the dilatation will be advanced more rapidly, etc." This last quotation contains its own refutation. I have been thus copious in my citations, for the reason, that they embody the views of all authors within my knowledge, Dewees excepted.

Now, what inferences are fairly deducible from the foregoing quotations? I shall state and answer them as I proceed: Firstly, the amniotic sac is the essential agent in the production of dilatation of the os uteri, producing it "by a direct lateral pressure against its edges." The fact, that in a fair proportion of multiparæ labors, the uterine orifice opens readily and to some considerable extent, before either the head or membranes have engaged with it, is fatal to this theory. Further, it is a well known fact to those who have made careful observation, that occasionally in multiparæ labors, where, from fragility of the membranes, the liquor amnii has been evacuated early, and before the head has descended sufficiently to press upon the os; enlargement of the orifice proceeds without interruption.

There are three agencies concerned in the production of dilitation.

Firstly: and essentially, contraction of the cervico—fundal fibres acting upon the circle of the os uteri through their free extremities. Secondly, a body, (the amniotic sac or presenting part) over which to retract the border of the os; and, Thirdly: pressure by descent of the amniotic sac, or presenting portion of the fœtus.

Secondly: The amniotic sac is a more efficient dilating agent than the vertex, for the reason, that the force exerted by the uterine contractions is "accurately conveyed to the os uteri ;" whereas the same force transmitted through the vertex. would "soon irritate" the os, and "prevent its expansion." Here we have groundless assumption, misinterpretation, of facts, and erroneous conclusions. By what law of mechanics does a yielding body like the amniotic sac, become a more efficient mechanical dilator than a solid body like the vertex? If the force of the contractions is (as is asserted) accurately conveyed to the edges of the os uteri,— the membranes being non-distensible, and therefore unable to absorb any of the force---why is the amniotic sac incapable of irritating and inflaming the os and arresting its dilatation, no matter how great the power exerted by the uterine walls? Can the vertex do more than transmit this force to the edges of the os uteri?

Again, it is assumed that the whole force of the uterine contractions is accurately conveyed by the amniotic liquor to the edges of the os uteri, as soon as the latter is opened in the "slightest degree." Now, the exact measure of force which the liquor amnii is capable of conveying to the edges of the os uteri, is determined by the force which the unsupported membranes at the orifice are capable of sustaining. Who can suppose for a moment, that those frail membranes can support the whole power generated by vigorous uterine contraction? Let us take even Prof. Murphy's own statement, when combatting the argument of Dewees, in regard to the antagonism of the circular and longitudinal fibres: "but how the membranes could resist the effect of this struggle it would be difficult to understand, when we know that the change of position, walking across the room, or other such trifling causes, are sometimes sufficient to rupture them, from the gravitation of the fluid alone, and therefore the greater force arising from the action of the fibres of the uterus against each other, must break them more frequently than what we know to be the case." Prof. Murphy therefore supposes, that antagonism between the vertical and transverse fibres, imparts to the liquor amnii, greater force, than when they contract conjointly. Such a view evinces a defective knowledge of hydrostatic laws. The simultaneous contraction of the uterine fibres, will distend the membranes at the orifice more forcibly than any partial contraction possibly can.

Further, it is assumed, that when the amniotic sac is prematurely ruptured, it is replaced by the vertex, which transmits the power of the uterine contractions to the os uteri, thereby irritating, and rendering it rigid and unyielding; and the conclusion is, that the tediousness of delivery, and apparent change in the condition of the os uteri, which usually attend this accident, are attributable to the alleged fact, that the vertex is incapable of dilating the os as efficiently as the amniotic sac. I have dwelt at length on this point, as the most important connected with our discussion; and an exposition of the mechanism and phenomena of the first stage of a primapara labor, will, I think, show wherein obstetrical writers have been led into fallacious reasoning, and false conclusions, by the oversight and misinterpretation of facts. At the commencement of labor, and before the os uteri begins to open; we find the child occupying the uterine cavity, with its pelvic extremity in contact with the fundus, and its head resting upon the pelvic brim, presenting the occipito-frontal diameter more or less modified,---the liquor amnii filling up the inequalities. As the contractions continue, the liquor amnii is displaced in that direction in which there is least resistance---the inferior segment; for it is a well known fact, that the muscular tissue diminishes in quantity, and therefore in power, from the fundus towards the orifice. Whilst the inferior segment is undergoing distension by the downward projection of the liquor amnii, the superior portion of the cavity is lessened, and the walls of the body and fundus permited thereby to apply themselves more closely upon the child. Then, as the cervix continues to dilate, and the os begins to open, further descent of the liquor amnii is allowed, so that the proportion of the uterine force transmitted to the pelvic brim, through the body and head of the child, increases step by step. As the os continues to open, and the membranes are more and more exposed to rupture from diminishing support inferiorly, the increasing contractile power of the uterus would certainly rupture them, were it not that, as the labor progresses, the proportion of force transmitted to, and expended upon the pelvic brim, through the child, is gradually increased. This is a wise provision of nature, for if the undivided power of the uterus should be exerted upon the unsupported membranes at the orifice as alleged by Prof. Murphy and others, rupture of them, unless preternaturally strong, would be inevitable at an early period of dilatation, in a large majority of first labors. As the labor progresses, the uterine walls are applying themselves more firmly upon the child, during each contraction, and the head is being flexed, so as to bring its smallest circumference in relation to the superior strait. Now, suppose that at an early period of dilatation, and before flexion of the head has proceeded to any considerable extent, the amniotic sac is ruptured, either from fragility of the membranes, or interference on the part of the medical attendant; what results? Usually, abnormal protraction of delivery, and injury to the child and mother proportionate to its duration. The cervical segment being relieved from distension, by the evacuation of the liquor amnii, retracts by its elasticity, and applies itself closely upon the presenting part, and does not come to be pressed upon until the head is completely flexed, and its sub-occipito-bregmatic circumference is passing through the superior strait. When the head is of due relative size, this step in the mechanism is never attained in the early period of dilatation, unless the cervical tissue is preternaturally unyielding. I therefore venture to assert that the statement of obstetrical writers,—Prof. Murphy included—that the ruptured amniotic sac is replaced by the vertex, which, by pressing upon the os uteri, irritates and renders it unyielding, thereby causing the tediousness which usually results where the liquor amnii is early evacuated; is entirely and radically erroneous. Further. it is a mere assumption to assert, that when the vertex, (covered by the soft, well lubricated scalp,) does come to press upon the os, it will irritate, and render it unyielding; for when, in the progress of labor, the occiput descends, it will dilate the orifice as favorably and as rapidly as the other unfavorable conditions will admit. Again, the theory implies that the delay will terminate with the full dilatation of the os, whereas it is a fact, that the delivery is delayed at every step throughout, by the too early evacuation of the liquor amnii. We have heretofore stated, that at an early period of dilatation, the head is but imperfectly flexed, and is not yet so adapted to the pelvic orifice as to prevent the outflow of liquor amnii, produced by the recurring uterine contractions. Complete flexion, and adaption of the sub-occipito-bregmatic circumference of the head to the pelvic brim, is by far the most tedious step in the mechanism of a primiparæ labor; usually requiring many hours for its accomplishment. The liqor amnii being thus gradually and completely expelled, the uterine parietes are permitted to close upon the unequal surface of the child. The circular fibres of the body, meeting with the least resistance, contract upon and constrict the abdominal region of the fœtus. Each succeeding contraction increases the constriction, until the compressed part becomes as resisting as the other portions. The child can only be expelled from the uterus by being made to glide upon its inner surface, and anything that militates against this process, will retard delivery proportionately. Now, as the resistance of the presenting part, conjoined with the resistance of this constriction, must be overcome by the contraction of the cervico-fundal fibres; the true cause of tediousness is at once made manifest; for the amount of power absolutely lost, is exactly equal to that which this constricted portion of the uterus is capable of exerting. And this relation of the uterine parietes will, at least, be partially maintained at every subsequent step of the labor, until the head is delivered; thereby causing abnormal delay throughout.

Through the foregoing explanations, it will be perceived, that protraction and injury are liable to result, whenever the liquor amnii is evacuated before the head is properly adapted to the pelvic orifice, no matter what degree of dilatation may have taken place.

We have thus undertaken to show, "that one of its most important uses (the amniotic sac) remains unfulfilled until the presenting part has passed through the superior strait; and that in all natural, *uncomplicated* labors, especially primaparæ, the membranes should not be ruptured at any time."

In cases of actual inertia the practitioner must exercise his judgment, in view of the conditions present, but *rigidity of the membranes* can in no way impede the descent of the presenting part through the pelvic brim. Therefore it is my deliberate opinion, derived from careful and extended observation, that rupture of theamniotic sac, especially in primaparæ cases, before the head is properly adapted to the pelvic orifice; is injudicious, and generally injurious, and sometimes fatal,—especially to the child, in its results. For, the altered condition of the uterine sinuses and the placenta, consequent upon prolonged and undue retraction of the uterine parietes, in conjunction with the violent pressure to which the infant is subjected; are well calculated seriously to impair the child's viability, even though it may be born alive.

There are other and important objections to rupturing the membranes, even when the os uteri is well dilated. Who knows at what period of a labor eclampsia may occur? Version may be desirable, but difficult and dangerous if the waters have been long evacuated. The same may be said in regard to rupture of the uterus. So also, if hæmorrhage; the first expedient being rupture of the membranes, the next, version.

In conclusion: as it is difficult to estimate in a given case of labor, to what extent its bad results may be fairly attributable to improper management, we may feel disposed to rest satisfied with our preconceived ideas and modes of practice. Let us, however, be reminded of the statistical fact,—established by the observations of Burns, Collins, Nagaele, Simpson and others; *that the liability to injury and death, upon the part of the mother and child, increases proportionately with the duration of labor.—Western Lancet.*

## *The American Medical Association and the Medical Schools.*

If we are to take the action of the late session of the American Medical Association as an indication of the feeling of the profession at large, then the evil which has so long been imminent is already upon us—that, namely, of a collision between the association and the schools, of such a nature as shall admit of no compromise, and can have no termination but the destruction of one or the other, or else a third denouement scarcely less to be deprecated, and in reality more probable, namely, an irreconcilable schism between the parties. We have now had time, since the close of the sittings, to consider, in all their bearings, present and prospective, the various measures presented to the Society, and lying over for action at the next session, and we confess that we have arisen from the study with undiminished anxiety for the result. We have also had the opportunity of perusing what our contemporaries of the medical press have thought and said upon the subject, so far as they have taken cognizance of it. Here we have been chiefly struck with the cautious reserve which our better class of periodicals have shown in taking up the subject. We have too high an opinion of our contemporaries to attribute this to indifference, and must assign it to a creditable apprehension of increasing existing animosities, and adding confusion to existing complications, that they have preferred saying nothing to the chance of saying something which might aggravate our present difficulties.

Yielding high respect to the motives which dictate this course, we cannot feel ourselves justified in following the example. When a railway train is hurrying to a collision, apparently inevitable, it may be well for private passengers to shut their eyes and see nothing until the catastrophe occurs, but those whose duty it is to manage the train have no right to look upon the disaster as inevitable till it has occurred; they are bound in duty to keep their attention awake to the occurrence of any expedients which even to the last moment may promise to avert or even diminish the danger—and having undertaken a position, however humble, as a contributor to the periodic literature of the medical profession, we do not think we should be standing up to our responsibilities were we to decline the consideration of the momentous topics now presented to us. When it becomes necessary, as it will next May, to come to a decisive action upon these subjects, we can imagine no state of things so sure to end in disaster as that under which no one has formed a definite conception what is to be done, or what are the interests at stake, or what is the probable result of this or that line of policy, or how far each man's responsibilities extend in reference to the final event. We have deemed it our duty then, to devote our most serious attention to these matters, and, such as they are, shall present the results to our readers, only premising that we have arrived at our conclusions under a deep sense of responsibility, not disguising to ourselves the error of the one party or the other, not especially believing that any success of the one party which should humiliate or degrade the other could possibly be a matter for congratulation, or forgetting, because we hold a chair in a medical college, that our interests as a *physician* far transcend those which affect us as a *professor*. This, indeed, is, as we look upon it, the great error of most of the parties who have undertaken the matter; they seem to have assumed that there was a necessary antagonism between the members of colleges and those members of the profession at large who desired to establish a high standard of professional qualification—forgetting that every professor is a physician, and that whatever affects the profession for good or evil affects him nearly and intimately as if he were not occupied in teaching as well as in practice.

To proceed, then—the portion of the society's proceedings which we propose to discuss are the following:

Firstly, the resolutions of Dr. Currie, which run as follows:

WHEREAS, The subject of medical education has been committed at each annual session to standing committees, and various suggestions have been proposed, which the association has adopted, and recommended to private instructors and to the medical colleges,

*Resolved,* That a committee of five be appointed by the committee on nominations, as a special committee, to be composed of members who are in no respect connected with any medical school, to *devise a system of medical instruction,* to be presented for the consideration of this association at its annual session in 1858.

*Resolved,* That the proposed system shall set forth a uniform basis, upon which our medical institutions shall be organized, as well as have reference to the best mode of securing the preparatory medical instruction to the student, and that consequently the legitimate subjects to be embraced in said system will include primary medical schools, the number of professors in medical colleges, the length and number of terms during the year, the requisite qualifications for graduation, and other such subjects of a general character as to give uniformity to our system, and preserve harmony and friendly intercourse in the ranks of the profession.

*Resolved,* That upon the adoption of the proposed system by the association, all institutions which may conform to it shall be entitled to rep-resolution at the annual sessions of this association, and none others.

These resolutions were carried against a set previously offered by Dr. Boring, to the following effect:

*Resolved*, That this association has not the power to control the subject of medical education.

*Resolved*, That the great objects of this association are the advancement of medical science and the promotion of harmony in the profession.

*Resolved*, That the attempt upon the part of this body to regulate medical education having most signally failed in its object, and already introduced elements of discord, any further interference with this subject would not only be useless, but calculated to disturb and distract the deliberations of this association.

It may be added that the committee appointed upon Dr. Currie's resolution consisted of Drs. James R. Wood, of New York; Geo. R. Grant, of Memphis, Tenn.; John Watson, of New York; C. B. Nottingham, of Macon, Ga.; Rene La Roche, of Philadelphia.

And Dr. Lindesley's proposed amendments to the constitution:

"In Art. II, omit the words 'medical colleges,' and also the words 'the faculty of every regularly constituted medical college or chartered school of medicine, shall have the privilege of sending two delegates.'"

The amendment lies over until the next meeting of the association, under a rule of the organization.

The operation of Dr. Lindsley's alteration of the constitution would be to exclude from the meetings of the association all delegates from medical colleges.

It would appear, then, that the first object in the estimation of reformers, is to deprive the schools of all voice in the proceedings, and then to devise a scheme, without their concurrence, without their having an opportunity to make a suggestion, and propose it to the schools, which are, we suppose, either to accept it unconditionally, or—or what?—quietly give up the ghost, or proceed on their work as they have done, leaving the association to do the same. Here are three different ways of dealing with the question, not one of which, we confess, is at all satisfactory to ourselves.

And first let us discuss the question, whether it is just and wise to expect the schools to accept, unconditionally, a plan, from the concoction of which they have been carefully excluded—whether they are likely to do so—whether they ought to do so. This is a question involving several considerations, foremost among which comes the constitutional point, is it right that the schools, who are numerically weaker than the medical tion in the society? This, we understand, was made a very prominent topic of declamation by those who think the schools should be shorn of their influence; nor have we heard of any important arguments on the other side; yet we are far from thinking that the wisdom of those who originally established the principles of representation in that body is incapable of defense. In no representative body, consisting of but one chamber, but representing a diversity of interests, is or ought the representation to be based merely upon numerical considerations. In the political institutions of our country it is obvious that, if we had but one legislative chamber, and that the house of representatives, with its numerical basis, the less populous states of the south, with their peculiar commercial and social interests, would be completely at the mercy of the more densely peopled eastern and northern states. This evil is balanced by the provision of a separate chamber (the Senate), in which all the States, populous or not, are equally represented; and thus, in a measure, is the probability obviated, of a numerical majority so legislating as to act oppressively upon the interests of states not able numerically to contest the points with them. Now, in our national medical association we have but one chamber; and if there be (as there undoubtedly is) in the profession a diversity of interests, it is both just and wise that the rights of any one of the parties to it should be secured from infraction, by such an adjustment of the representative basis as shall enable it to be heard with effect.

Now, it needs very little argument to show that the teaching portion of the profession stands exactly in this position. The national association claims (and never so peremptorily as now) to dispose of everything relating to medical instruction, and that absolutely and without limit. If the language of some of the present advocates of change is to be taken as the true exposition of its powers, it can legislate all existing schools out of existence, and establish a new system of education in their place. If, then, the interests and very existence of the medical schools is at the mercy of the association, is it not a most reasonable provision that they should have their representatives in that body to vindicate their peculiar rights and interests? Is it right that a body of men like the faculties o the medical schools of this country, possessing, we are bold to say, an aggregate of talent and character at least equal to that of any body of men in the nation who could be similarly associated in interest, should have their rights and interests, and very existence, at the mercy of a council board in which they have no voice? We have, for argument's sake admitted that the numerical assumption is correct, that the delegates from those from the schools; but we very much doubt whether, after all, this, is practically the case—whether it is anything more than one of those figments upon which so many political arrangements are grounded. We have become acquainted with the details of more than one society, formed for the express purpose of sending delegates to the meeting of the general association, and we leave it to our readers, who are similarly informed, whether what we are now going to describe is not a correct delineation of such proceedings in a great many instances, whether it may not, indeed, (to borrow a word from pathology,) be received as a typical case, exemplifying a class rather than an individual instance. In a county or city, as the case may be, some few months before the meeting of the general Association, some physician, (or physicians,) fond of individual prominence, is suddenly struck with the necessity of having the profession in the county or city aforesaid represented in the national conference. He holds conversations, say, with five or six other physicians, who are brought to a similar conviction, and the half dozen of them go about and talk their best, or use whatever other means of influence they may possess with their brethren to induce a sufficient number to meet together and organize a new society or revive an old one, and then, after electing officers, etc., the original concoctor or concoctors are appointed delegates—very deservedly and proper—and the society goes to sleep again, till another season for appointing delegates evokes its torpid vitality. Now, who do the delegates in question represent—we mean practically, apart from all legal factions? Not the unheeding members who have been talked, and begged, and urged into coming there for the purpose of an organization, and who care no more about the society than about parliamentary organizations in the moon. But at the utmost the few who exerted themselves to get up the society, if even those few, care enough about it to have it kept up after the object is subserved. We are certain of this, to come down from generality to particulars, that in Memphis, if if had not been for the active exertions of members of the Medical College, the society which sent a delegate to represent the profession of that city in the recent national association would have been a very small affair indeed—would have consisted nearly exclusively of the personal friends of the excellent physician who was ultimately appointed, and who so creditably sustained the character of Memphis in the national councils. And since the session of that body, the two or three who have been gathered together at the times for the regular meetings of the society, in the vain hope of a quorum, have consisted exclusively of members of the college.

numerically, the constituents of the members sent by societies are practically more numerous than those sent by the colleges, especially if from the constituency of the former be deducted those physicians who are also professors. In the Memphis Medical Society, with not more than one or two exceptions, the members of the college have been the only men who have taken an active and permanent interest in keeping it up, and if it has been objected to, that it has been a mere creature of the college, the only color to the assertion has been that the college faculty adhered to it and kept it up after every one else had deserted it. Let us here boldly assert our belief that the preponderance of college interests in the American Association, if real, has had a similar cause. Assuredly the number of societies which exist, or might be formed if the profession took sufficient interest in the matter, is vastly greater than that of the medical colleges, so that there is every facility for outnumbering the college delegates by those from societies representing the profession at large—and if this has not been done, why is it so? Not surely from any inherent defects in the constitution of the society, but from the greater interest which the members of the colleges take in the public concerns of the profession than do the physicians at large.

Alas, if the purposes so plainly and eagerly expressed at the last meeting of the association be really carried out, and the delegates from colleges be excluded from its councils, we fear it would become painfully apparent how little claim that body had to be considered as representing the medical profession of the United States. If the schism toward which recent events so ominously point should really take place (which may God avert), we know not what might be the effects on the colleges, but the association, we feel sure, would become deplorably insignificant. We are farfrom looking upon this as a desirable consummation; we desire for the association a long and useful existence—we wish that it more really and practically represented the whole profession than it does; but we think it absurd to suppose that its position and influence would be stronger without the concurrence of colleges.

But to descend from general constitutional considerations to the conjuncture now before us, we would put the question; is the principal problem now at issue, the improvement of the system of medical education, likely to be better resolved with or without the intervention of the medical schools in the deliberations relating to it? We are not here calling in question the attainments of any of the eminent men placed upon the committee for this purpose. As a learned cultivator of medical literature and as a skillful and practical physician and surgeon, we do not suppose have been selected out of the whole profession, either within or without the schools, and we know our fellow-citizen, Dr. G. Grant, for a public spirited and well informed physician, who loves his profession. It is true that the exclusion of Dr. Currie from the committee appointed upon his own resolutions is a matter which yet remains to be accounted for; yet with all omissions it is a good committee, as good as we could wish, supposing it right that members of the medical schools should be excluded. But this provision, we are convinced, could not detract much and add nothing to the efficiency of the committee. For let us grant that these gentlemen were as competent as could be found for devising a scheme for medical education, excellent in the abstract, there is yet another set of considerations which surely could not be so completely dealt with by them as by men now actually engaged in the duties and responsibilities of medical education. We allude especially to those considerations which arise out of the local circumstances of the field in which this educational scheme has to be put in action. How are these gentlemen, writing their books and practicing the duties of their profession in Philadelphia, New York, etc., to form a practical estimate of the feasibility of this or that scheme, and its adaptation to peculiar circumstances, and its competency to deal with peculiar difficulties, here in the valley of the Mississippi? for we apprehend that adaptation to peculiar circumstances, and practicability under peculiar difficulties, are as essential qualifications of the forthcoming scheme, as the abstract excellence of its standard attainment and method of instruction. We have already, in a former number of this journal, endeavored to show that the standard of attainment for the average medical practitioners in a given community, must grow out of its peculiar circumstances. We there pointed out that an arbitrary standard, one derived from a different condition of society, could never be successfully transplanted to an uncongenial soil; but, not to be at the labor of repeating the same observations in different language, we quote from the article in question:*

"Let us consider what is the standard in England: The candidate must there, first of all, by examination, show himself to be in possession of a thorough liberal education, and under that term is included all that *we* mean by a complete university course; all this, I say, is to be determined by an examination before the medical course is commenced upon; but an academical degree in one of these public universities is allowed to supercede this examination. Such a degree costs those who receive it the school education, which lasts till about the age of eighteen, is complete. Supposing all this to be gone through with, the proper medical education commences, which, including hospital attendance, etc., cannot occupy less than five years, the expenditure already specified being at least doubled during the time. Now, suppose that we were to adopt this rule here—suppose it were to be adopted throughout the United States, does any one suppose that there would be a single graduated M. D. outside of the great eastern cities, or inside of them, anything like sufficient for the mere city practice? Why, the money expended in it alone would, in this country, be a small fortune, and if used judiciously for the number of years I have specified, in any one of the boundless fields open in this great country for the investment of capital, would, by the time your Englishman is ready for his diploma, have amounted to a very large fortune, as fortunes go here. This must be enough, then, to make it obvious that the amount of time and capital which young men have to possess in order to attain to other respectable modes of acquiring a position and making a subsistence in the world, is the measure of the materials which we possess for making doctors of. If we wait for anything more than this, we might as well wait for the Mississippi to flow past before we step over into Arkansas. We must do the utmost we can with the materials furnished to us, and not spend our time in a useless sighing after what cannot be had.

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*Memphis Medical Recorder, May, 1856, p. 355.

Another circumstance likely to affect this question is the average amount of remuneration a physician is likely to receive for his practice when he has got his diploma; for men are not ready to spend much labor, time and money upon preparation for a profession which is likely to make an ungrateful return for the expenditure. Now the labor, time and capital which the student is willing to spend upon his apprenticeship constitute the material out of which new physicians have to be produced; and those who are without a practical knowledge of these resources, their amount and nature, are no more fitted to legislate for the emergency than would an architect be to contract for a large building, who was skilled, indeed, in the proportions of Corinthian facades and Palladian domes, but who was ignorant of the physical properties of wood and stone and iron.

Perhaps a better illustration could not be given of the fertility of trying to establish a standard of qualification unadapted to circumstances than may be drawn from the history of the profession in England. The physicians of old in that country were great sticklers for keeping the profession exclusive. This was to be done, not only by requiring a

This was done avowedly for the purpose of keeping the profession select. They would defend their mode of proceeding by contending that it was necessary to provide that the physician should be a *gentleman* as well as a scholar—rather a snobbish idea of a gentleman, to be sure, where the length of his purse was to establish his claim to the title. But, however, the custom was sufficiently successful to establish the regular *diplomats* as a sort of professional aristocracy who held their heads very high among the various social circles into which the middle classes were divided; but another result was that the number of persons entitled by diploma to write themselves M. D. was ridiculously small compared with the amount of work to be done; and, moreover, as will happen under such circumstances, their fees were so high that it was utterly out of the power of the people at large to employ them. The inevitable consequence of all this was that some one or other not stamped with a diploma should step in and do the work. This was, in fact, done by the apothecaries of the time. These men were, by law, only authorized to dispense the prescriptions of the physicians; but, from first selling a few of the simpler medicines, with directions for their use, they gradually went on to occasionally prescribe for minor diseases at the counter, to draw teeth and perform other minor operations in surgery; then they would visit patients, and finally got employed in all the cases that required the aid of physicians and surgeons, by those who could not afford to employ a regular M. D. Within the present writer's recollection it was quite common with families in the country to employ a physician for their own ailments, while the apothecary was called in when the servants got sick. Well, at first the prescribing apothecaries were bitterly opposed by the physicians, who, in truth, were not without fair pretext for doing so, as many of them were excessively incompetent; but, gradually, as population increased, the practicing apothecaries became more numerous, the titled physicians fewer, the apothecaries better educated, the physicians less manifestly their superiors; and, especially, as there came to be a large field of practice which the physician could not undertake, the apothecary came to be in some sort recognized by the physicians; they would even meet in consultation —if consultation it could be called—where the apothecary was barely allowed to call his soul his own; the truth is, that they only came together at all when a case in the hands of an apothecary became serious and the family alarmed, and some eminent physician from a distance was called in, under which circumstances the apothecary was retained, but was exin his absence. Moreover, the status of the apothecary came to be partially recognized by the state. In some instances he was employed by the state, as in attendance on jails, almshouses, &c.—especially where the salary was beneath the notice of the more lordly physician. But this state of things was getting unsatisfactory to all parties. Not only was the apothecary, (though now a well educated gentleman in many instances) liable to these mortifications, but it was illegal for him to recover a bill for medical treatment except in the form of charging for medicine, and thus is supposed, among other results, to have arisen the excessive medication which characterized English medical practice fifty years ago. Another result was that as he practiced rather by the connivance of the law than in accordance with its provisions, no law could relate the qualifications required of him before he could practice. So that, though many men practicing as apothecaries possessed very high qualifications, yet there were many more who were utterly defective in their medical education. In consequence, a succession of acts of Parliment were passed at different times endeavoring to define the nondescript position of the practicing apothecary, and finally he was established in a definite legal position, with his name changed, under the title of a general practitioner. This title was given to indicate that the possessor of it practiced both medicine and surgery, it being considered *infar dig.* either for the physician to practice surgery or the surgeon to prescribe otherwise than for a surgical case—a feeling which is still kept up so far that it is provided that the Colleges of Physicians and Surgeons shall be presided over by a pure physician and a pure surgeon, respectively; i. e., by gentlemen neither of whom has soiled his delicate hands by stepping beyond his *specialty.*

The state of things is this, then, at present: the general practitioners, the successors of the licensed apothecaries, are to all intents the physicians of the people, including in this term the respectable middle classes as well as the poor, the physicians proper and the pure surgeons forming a kind of professional aristocracy among them, more or less recognized according to the talents and success of the individauls claiming rank as such.

Now, it seems to us, that this simple narrative is full of instruction most valuable for us: we are specially fond of pointing out the errors of older countries, we are much less willing to learn wisdom from their mistakes. But let us suggest that if we should be guilty of an error similar ment. There, as soon as it was seen that the needs of the country could not be filled except by legalizing the practice of the apothecary, under the title of general practitioner, it was found possible to establish him not only with his rightful privileges and emoluments, but with proper checks and securities for his training and competency. But, can this be expected here? Suppose that by adopting an impracticable standard of qualification for physicians, we should throw the whole of the growing population of these western states into the hands of untrained, unqualified, and unrecognized practitioners—as would undoubtedly be the case—what then could our legislatures be reasonably called upon to do to remedy the evils which professional want of foresight had brought about? What are we to infer, from their previous actions in regard to our profession, what would the spirit of their legislation be, if they consented to legislate at all? We implore our committee and other parties to the solution to put this question earnestly to themselves before they take steps, which, if once taken in the wrong direction, are obviously irretrievable. If, then, the circumstances which affect the practicability of any scheme proposed are so momentous a topic for consideration, who—we would repeat the question—who are the persons most likely to be possessed of information upon the subject? Who but those who have spent their lives in the practical efforts to elevate the standard of education, and have thus become practically acquainted with the difficulties which environ the subject? Who but the existing medical teachers, whom it is the proposition to exclude altogether from the national councils of the profession, and who have already been excluded from the treatment of this question? The only ground that has been alleged for doing so, viz: that it is contrary to the interest of existing schools to improve as far as practicable the existing plan of education, we shall not condescend to answer or to take into a moment's consideration; we will only observe that we know of no one in the profession who has advocated with so much zeal and intelligence the cause of educational reform as Drs. Wood and Gross of Philadelphia, Dr. Fenner of New Orleans, and, with, perhaps, humbler claims to attention, but certainly with a zeal no less ardent, we claim to have been now for a long time a consistent advocate of all practicable reformation, and to have exerted our best abilities in pointing out where defects existed, and how they might be remedied. Doubtless, there exist temptations in this occupation as well as in all others to make private emolument a stronger motive than the public good, and doubtless these temptations have in some instances been yielded to, but we certainly see no security for supposing that if the duty of instructing the rising generation of physicians were withdrawn from the hands which at present exercise it, a body of men more conscientious and more zealous for the well-being of the profession would be substituted.

It remains to be considered what ought to be the course pursued by the teaching members of the profession in reference to the questions to be brought before the next meeting of the national association; and, of course, no definite course can be chalked out till the aspects and probable line of action to be pursued by that body can be calculated upon. Our own expectation is, that so far as the action of the last convention was hostile to the teaching members, it will be reversed in the next. We have already shown that from the non-attendance of delegates from distant States, and the preponderance of certain local influences, the last meeting cannot in any sense be looked upon as representing the general state of feeling throughout the profession, and we shall not be surprised to see the motion of Dr. Lindsley laid on the table, while the committee appointed under Dr. Currie's resolutions will doubtless report, and its report be treated with courtesy; but, we anticipate no attempt to *enforce* its recommendations, and thus the only results of the unfortunate line of action pursued by the association would be to defer for a year longer any concerted action on educational reform. Should this be the case, we think that then the schools themselves should initiate some well concerted plans of improvement to be presented to the meeting of 1859 for its approval. On the other hand, should the action of the association be confirmatory of that of last May, then we think the schools should undertake the matter in concert with one another, but entirely apart from the association—leaving that body to carry out its own measures. This position of things we earnestly deprecate, however, as leading obviously to a formal schism between the schools and the association. We trust the conjuncture will not be presented.—*Memphis Med. Recorder.*

# EDITORIAL AND MISCELLANEOUS.

## Endowment of the Atlanta Medical College.

We are happy to have it to announce to the many kind friends who have taken an interest in the welfare of the Atlanta Medical College, that the Legislature of Georgia, at its recent session, made a handsome appropriation for its benefit.

This liberality upon the part of the State will place the institution upon a still more firm and impregnable basis, by relieving it entirely from embarrassment, and furnishing the means of completing the building according to the original design, which will add greatly to its external appearance, and make it an architectural ornament to the city.

When we recollect what has been accomplished in three years by those who have built up this institution, in the face of the most discouraging circumstances, we feel that it is difficult to put a limit upon its success, provided we have a continuance of the same energetic and determined purpose which has heretofore characterized its founders. That we shall have this, and even more, we hesitate not to say. The recent munificence of the State will only serve as an additional stimulus to the energies of the Faculty, and we feel authorized in asserting that they have no lower ambition than to furnish advantages to the medical student equal to those to be found in any institution in the land; and not only this, but to establish the *highest standard of requisitions for graduation* which shall be adopted and *conformed to* by the medical colleges of the United States.

Those who have been guilty of the contemptible effort to produce the impression that *the season of the year* at which the lectures were delivered, was intended to lower the standard, may yet learn that they are behind those who control the Atlanta Medical College, in the race for the elevation of Medical education.

The *catachetical* plan of teaching which has been introduced into this College, in addition to the old plan of lectures, has already contributed to the more thorough instruction of the students who have been in attendance here, so much so, indeed, as to have superseded the demand for what has been heretofore considered an indispensable appendage to a Medical College, the *private drill or Quiz*, for the *preparation* (not instruction) of those who were to become candidates for graduation. And as suggestions upon the subject of medical education seem to be the order of the day, we take the liberty of urging upon those who are directing their attention to this matter, the adoption of the plan embracing regular and systematic recitations previous to each lecture, upon that which has preceded it from the same professor, the advantages of this plan being so perfectly manifest to those who have witnessed it, that they are forced to the conclusion that the student is really more benefitted by the recitation and accompanying recapitulation than by the formal lecture upon which they are based.

We then say to those who have taken medical education *just now* under their peculiar guardianship, "*come on*," and "show your faith by your works," and not attempt by vain boasting, supercilious sneers, or yet more reprehensible conduct, to bring your competitors into disrepute by pretensions to which you have no just claim.

While the recent endowment of the College has been mainly due to the indefatigable exertions of our Senator and Representative in the Legislature, (Messrs. WHITAKER and WESTMORELAND,) in presenting its merits, we yet owe a debt of gratitude to a large number of the most prominent and intelligent members of both Houses who investigated and acknowledged our claims to aid, and who have manifested an interest in the enterprise which shall nerve every energy to the upbuilding of an institution that shall be an honor to the State, and in this way make some fit return to the Legislature of 1857, towards whose intelligence and appreciation of the true interests of the State, we feel in a particularly complimentary mood.

The Atlanta Medical College is emphatically and peculiarly a *Southern* institution, from the fact that its sessions are held *only in the summer*, and on this account is cut off entirely sources for support, which, however, are amply sufficient to meet the largest desires, if its true position is appreciated. Occupying as it does the only point in the Southern country where summer medical teaching can be successfully conducted, —being one of the most pleasant and healthy localities in the whole United States, (the summer being far more pleasant than many degrees farther north, from the great elevation of the country,)—never having been visited by any of those fatal epidemics which scourge more or less almost every other city of any importance in the South, and possessed of a centrality, and especially an accessibility, unsurpassed, combined with a cheapness of living scarcely found anywhere in a city of the same size, it can not be otherwise than that the institution must be permanently sustained and become eminently prosperous, if the people of the South are true to their own most manifest interests. From the remarkable progress of the institution thus far, we have good reason to conclude that it was a *desideratum*, to furnish our Southern young men facilities for the pursuit of medical knowledge during the summer months upon their own soil, in a pleasant, accessible and perfectly healthy locality; in vindication of the truth of which inference, we would state in conclusion, for the benefit of those who have not been made acquainted with the statistics, (thinking it possible that this number of our Journal will fall into the hands of many who are not fully acquainted with its history,) that the College has been in operation three years; the first year numbering 79, the second year 105, and the third 125 matriculates, with the prospect (notwithstanding the great financial embarrassment of the country,) of an increased class at the next session.

## "American Medical Association and Medical Education"

Under the head of Selections, will be found an article taken from the editorial department of the Memphis Medical Recormore practical, good sense, upon the vexed question of medical education than we have met with in some other quarters, that we would commend it to the attention of those who have of late constituted themselves the special champions and peculiar defenders of the rights, powers and obligations of the American Medical Association.

Without entering again into the merits of the abstract question, (which we have already so fully discussed through our columns,) we would remark, that though connected with a Medical College, we are, perhaps, as little dependent upon the *business* of medical teaching, as some of those who boast more largely of their independence and freedom from selfish considerations in the present pseudo reform movement upon the subject of medical education.

We know that the origin and true character of the recent agitation of this question is fully understood by us, and unless we greatly mistake the indications, some of those who have "raised the wind will yet reap the whirlwind"—some of those who have been digging a pit for others, may yet find it their own resting place—some people who have been throwing stones may soon find the shattered fragments of their own houses toppling about their heads.

The warning which we have given, upon a former occasion, that "pride cometh before a fall," to which may be added, "set your own house in order, before going about to regulate those of others," we again commend to the attention of some people who are more under the influence of selfishness and a spirit of revenge, than the desire to elevate our noble profession.

We are most decided advocates of a more thorough system of medical instruction, as we are equally the advocates of sincerity and common sense, and are ready to meet this question, let it come in what shape it may.

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☞ We find upon our table among a large number of addresses, monographs, and pamphlets of great variety which we have not been able to notice. "An Introductory Lecture upon Medical Education," delivered before the Memphis Medical College, on the 2d day of November, 1857, by A. P. Merrill, M. D., Professor of the Principles and Practice of Medicine, which, if we had space, it would afford us great pleasure to publish entire, as it contains many strong and striking views upon a number of points connected with this subject. We are much pleased to learn that the Memphis Medical College is now upon a stable basis, and is looking forward to a bright and successful future. We have intimated upon a former occasion, our opinions in reference to the advantages of Memphis, as a seat of medical learning, and hope to be able to chronicle the prosperity which the location and the merits of the institution should assuredly secure,

## Asylums for Idiots.

We perceive from a statement in the Boston Medical Journal that on Wednesday the 9th of December an interesting meeting was held in Philadelphia, upon the subject of Asylums for Idiots, by the Representatives of the following Institutions: "The Massachussetts School for Idiotic and Feeble minded youth," at Boston; "The Massachussetts Private Institution for Idiotic, Imbecile and Backward Children," at Barre, Massachussetts; "The New York Asylum for Idiots," at Syracuse; "The Ohio Asylum for Idiots," at Columbus; "The Pennsylvania Institution," at Germantown. The object of the meeting was to organize an association for the purpose of bringing the subject of Idiocy before the people, discussing questions of interest, and maturing methods of treatment, relative to this unfortunate class of human beings. As the result of these discussions, which were purely practical, certain principles were adopted. The next meeting of the Association will be held in New York. We hope before many years that the Legislature of Georgia will do something for the relief of this piteable portion of our fellow creatures, by the establishment of an Asylum specially designed and adapted to there condition. Under the present arrangement—placing them in the "Lunatic Asylum of the State"—that Institution is not only crowded with those for whose proper management their is no preparation, but it is prevented from giving accommodation to those for whose special benefit it was established.

With this change, and the exclusions of Epileptics—who ought to be placed in Hospitals—and the completion of the magnificent building now in the course of construction, and the other liberal arrangements provided for at the recent session of the Legislature, we shall soon have a provision for the Insane, worthy of the great State of Georgia.

## Dr. Bowling of the Nashville Journal.

The inconsistency, unfairness, and double-dealing of the individual whose name heads this article, having been established, *beyond controversy*, we shall not pursue him into the mire and filth under which he has *taken cover*, but should he again emerge from his *retreat*, and *stray* into the confines of decency, we may be tempted to re-pepper his vulgar carcass.

*Belladonna in Hernia.*—In the Gazette Hebdomadaire of the 9th of October, we notice the report of a case of inguinal hernia which was relieved after taxis had failed, by the administration of the Ext. Belladonna, in three or four grain doses every half hour. The Tinct. of Belladonna was also employed locally by means of a flaxseed poultice.

In the same Journal we find the report of another case in which Belladonna was administered with very great relief to the patient. In this there was no protrusion of the bowel, but from the symptoms, obstinate constipation, great pain, stercoraceous vomiting, &c., it was evident that there was complete occlusion of the bowel. The Belladonna in this case was employed after an operation for artificial anus had been decided upon. The remedy was used in the form of ointment by friction, and as soon as complete intoxication was induced, its good effect was perceptible.

*Cœsarian Operation after the Death of the Mother.*—From a Bulletin of the *Académie de Médecine*, on the 17th November, found in the Gazette Hebdomadaire of the 20th of the same month, we learn that M. Velpeau reported to that body a successful Cœsarian operation performed twenty minutes after the the death of the mother. The mother had arrived at the full term of pregnancy. The operation was performed by M. Lerey—Desbarres Surgeon of Hotel—Dieu of St. Denis. We hope to have soon a more extended report.

*Revaccination.*—We see from the French Journals that this subject is being agitated in France. The *Académie de Médecine* has re-commenced a system of Revaccination to be enforced by law. One of the great causes of failure in vaccination, is the difficulty of preserving the vaccine matter. All agree in the impossibility of preserving it between tied pieces of glass.

*Early Operations for Hare-lip.*—Dr. Friedberg relates (Med. Chir. Rev. July, 1856) three cases of hare-lip performed at the following ages, viz: fourteen hours, ten hours, and three hours after birth. Chloroform was administered in each instance, and they all terminated favorably. The same writer advocates the early operation for hare-lip, in his recent work, Chirurgesche Klinik.

To these cases we may add the following: Dr. Dawson (Dub. Med. Press 1842) operated on a child having a simple hare-lip, seven hours after birth. The pins were removed in forty-eight hours, and in two days more the union was so perfect that the mother, who had not seen her child, did not believe any deformity had existed. Mr. Bateman operated (Med.

also fissure of the palate, so great as to admit the mother's thumb. The operation suceeded, and the fissure of the palate contracted so as scarcely to admit the edge of a sheet of writing paper. Malgaigne advocates early operation, and has operated nine hours after birth. P. Dubois and Guersant prefer operating immediately after birth.—*Va. Med. Journal.*

*Ligature of the External Iliac Artery and Vein—Rapid Recovery.*—Dr. E. S. Cooper, of San Francisco, relates (Trans. State Med. Soc. Cal.) a case of successful ligature of both the external iliac artery and vein. The disease was a traumatic femoral aneurism. The operation for tying the external iliac was performed in the usual way; but on attempting to separate the peritoneum, which was very much thickened and adherent to adjacent parts, a gush of venous blood occurred from the iliac vein. The only remedy was the ligature, and this was accordingly applied above and below the wound; the artery was then tied. The patient made a good recovery. One fact worthy of note is, that the temperature of the limb did not fall materially. Dr. Cooper adds, that he has ligated the external iliac artery in six dogs, one of which died; in five he tied both iliac artery and vein; all recovered. In the first class, the limb became cold in every instance, in spite of stimulating applications; the sensibility of the limb was also greatly impaired. In the latter class, the heat and sensibility of the limb remained nearly natural from the first.—*Ib.*

*Surgical Excerpts.*—*Calculus.*—Dr. Broenner relates (Wurtzburg Verhandlunger, 1856) a case of urinary calculus in an infant of one year, evacuated spontaneously. This concretion was composed of urates, and was six millemetres in diameter. Its passage through the urethra was accompanied by violent symptoms and almost complete retention of urine.—*Ib.*

*Dyspnœa from bronchocele relieved by division of the cervical fascia.*—M. Cusack relates (Dub. Hosp. Gaz.) a case of bronchocele in a boy, æt. 17 years, which, by its pressure, caused such a degree of suffocation as to threaten his life. He obtained some relief by making pressure upon the tumor, thus relaxing the fascia. His symptoms finally became so alarming that surgical interference was necessary, when Mr. C. determined to divide the cervical fascia over the tumor. Before obliged to open the trachea, and resort to artificial respiration. The patient revived; the wound was closed, and the relief was permanent; due, as the operator believes, to division of the fascia.—*Ib.*

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*Extirpation of the entire clavicle.*—Dr. C. R. S. Custis of Chicago reports (Am. Jour. Med. Sci.) a case of successful removal of the entire clavicle, for an osteo-sarcomatous tumor, involving its middle third and external portion of sternal extremity. The patient had previously had syphilis.—*Ib.*

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*Hemorrhoids.*—Dr. Van Holsbeek recommends the following formula as of remarkable efficacy in the various forms of hemorrhoids, provided that these are uncomplicated: ℞ Sulphuri loti, sacchari canarini, of each ℥j; ext. strychn. nux. vom. gr. vj. To be mixed with a sufficient quantity of tragacanth so as to form twenty-four lozenges. Of these two are to be taken the first day, the number being increased by one every day, until six are taken daily. The patient is then to keep at that number during four days, when he is to diminish it gradually until only two are again taken daily. If a radical cure is not by this time effected, he must follow the same course again. The amendment is, however, usually so rapid that the treatment at farthest lasts a week.—*Presse Med. Belge*—*Ib.*

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*The last new Medicine.*—There is a new medicine coming out, which is destined to eclipse all the hair balms and purgatorial purgatives. The name has not been absolutely fixed upon, but a majority of the proprietors are inclined to call it the Odontoanneneakaton, or Compound Extract of Coral and Caoutchouc. You are Greek scholar enough to recognize, at once, its use and value. The observation having been made that children are much assisted at the time of dentition by biting India-rubber rings and coral, an acute gentlemen thought that a combination of the two would have perhaps a decided effect in restoring the teeth of elderly females. From this hint the medicine has been brought forth. The dentists, of course, are down upon it, but with a certificate from some chemist of the undoubted purity of the extract, and with the patronage of the Female Medical College, the proprietors may defy the whole profession. When it comes into general use you shall be duly informed.—*Med. & Surg. Reporter.*

ery flourishes, with unabated vigor. People who are too poor to pay their just debts can afford to throw away dollars at a time for a bottle of stuff which perhaps costs the fabricator as many pennies, and though they fail of receiving the benefit which it promised, will seize with avidity on the next that offers, regardless of cost. I believe this branch of the business community is the only one which has not felt the pressure and been obliged to suspend. Lately, some of the lowest kind have been throwing into every house a circular of the most filthy character, a number of which I have encountered in my rounds. It is quite a common thing to be insulted by a boy putting in your hand a book of cases, certificates of cures, &c., with an almanac attached. This is a thing that should be suppressed by the police. Besides this, column after column of almost every paper you pick up is filled with their advertisements, and we might verily believe it impossible to die with so much positive proof of astonishing cures, &c. Apart from all other considerations, how many are actually injured by these nostrums! Again, how cruel is it to arouse within the breast the wildest hopes of cure in the case of some cherished relative or friend, only to be dashed down again, and deeper, owing to the height to which they have been raised.—*Ib.*

*Medical Classes in St. Louis.*—The number of students at present in attendance in our Medical Colleges is considerably greater than at a corresponding period last year, and the probabilities are that we shall have larger classes this winter. The "hard times," which are bearing so heavily on the commercial interests of the land, seem not to have reached the farmers in the country, and will in all probability not affect the Medical Schools injuriously. Indeed, we believe it will hold true, as a general rule, that when a check is given to commerce and speculation, the effect will be to increase, rather than to diminish, the number of those seeking admission to the learned professions, as by these reverses men are brought to realize the fact that the slow way of making a living is, after all, the better way.

The public Introductory Lecture before the class in the St. Louis Medical College was delivered on Monday evening, November 2d, by Prof. Charles W. Stevens; and that before the Missouri Medical College on Tuesday evening, November 3d, by Prof. S. G. Armor.—*St. Louis Med. and Surg. Journal.*

*Nitrate of Silver in Toothache.*—The common methods of destroying the nerve in a tooth without extracting it, are the application of nitric or sulphuric acid, or a red-hot wire, but these are very painful expedients.

Some time ago I tried the application of a small piece, about the size of a pin-head, of stick caustic (nitrate of silver) in the hollow of a decayed tooth, from which I was suffering extreme pain. To my great surprise the pain instantly ceased on the caustic touching the nerve, and I had not a return of the toothache for twenty-four hours: when I again applied the caustic, and again got immediate relief, which continued over twenty-four hours. I had occasion to make a third application of the caustic, but since that time, now some months ago, I have not been troubled with the toothache.

This cure will be found ineffectual if gum-boils accompany the toothache, for in that case the decayed part of the tooth is on the outside of it, and, therefore, the application of the caustic to the interior of the tooth can do no good.—Dr. J. Johnstone, in *London Lancet.*—*Boston Med. Journal.*

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*Attempted abortion by American Hellebore*:—*Messrs. Editors.*—Having noticed a case of attempted abortion by the use of veratrum viride, reported in a late number of the Journal, I extract a similar case from my note-book, which may be of interest in connection with the other.

I was sent for in great haste, and on arriving at the house, found a young woman vomiting freely and complaining of intense pain in the stomach. She was cold and pale. Pulse 40. I inquired what she had taken, and was told "skunk-cabbage." Doubting this, I made further inquiries, and learned that she had taken a teacupful of infusion, prepared from the fresh root of what they thought was skunk-cabbage, (*symplocarpus fœtida*,) but which I found was veratrum viride, gathered by mistake. I was shown what they called a "doctor-book," (a small, popular treatise on medicine, &c.,) in which it was stated that skunk-cabbage would relieve the womb of its contents. The person gathering the root was ignorant of the distinction between the two plants, and hence the mistake. She vomited freely for some time. After the stomach was relieved of its contents, I prescribed an opiate, and she soon recovered. It had no effect on the fœtus in the womb, and in about six months she was delivered of a healthy child.—*Boston Medical Journal.* CHAS. PALMER, M. D.

*Strafford, N. H., Dec.* 15, 1857.

ATLANTA

Medical and Surgical Journal.

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# ORIGINAL COMMUNICATIONS.

## ARTICLE 1.

### *Meteorology as a collateral Science to the study of Medicine.*—By E. M. Pendleton, M. D., Sparta, Ga.

Until within the last half century, the science of meteorology had made but little progress, and developed but few facts of much interest to the philosopher. More recently the attention of the scientific world has been directed to this interesting field of human knowledge, with the best results, especially with reference to its connection with climatology and agriculture. Strange that up to the present time nothing has been said or written as to its connection with Hygiene and the etiology of disease. Our own knowledge of meteorology, (having been engaged in taking observations for the Smithsonian Institution for several years,) has led us to infer, that most idiopathic diseases, and many considered as symptomatic, result, from the variable conditions of oxygen, caloric, water and electricity in the atmosphere. Any means that might be instituted to ascertain the exact quantity of these four great principles at given periods and localities, in connection with statistical records of the prevailing diseases, would in our opinion, establish inductively important truths in relation to the etiology of disease, that are totally unknown, or exist as mere theories.

The primary fields of observation, occupied by the meteorologist, may be briefly stated as follows: First, barometrical, or that which estimates the pressure of the atmosphere, and by consequence enables the scientific observer to determine its density at any given period of time, and whether an excess or deficiency of oxygen prevails. Second, the thermometrical, or that which ascertains the thermal condition of the atmosphere, estimates the relative amount of caloric in a cubic foot of air, &c. Third, the hygrometrical, which tells with mathematical precision, the amount of aqueous vapor existing in the atmosphere at the time of taking the observation. Fourth, the electrometrical, which designates the quantity or intensity of the electric fluid in the air at any given time or place.

In connection with these great primary principles, are others not so specially connected, it may be with the elimination of disease, as those above mentioned, such are the fall of rain, snow, hail, dew, &c.; the force, velocity and course of the wind; the character and extent of the clouds. But, even these to the constant observer, will afford much matter for reflection, and reveal facts in connection with the etiology of disease, which otherwise would remain undeveloped. Thus the force and velocity of the wind might affect the human constitution, either by purifying the atmosphere, by dispersing noxious vapors, or producing sudden changes of temperature, which is, doubtless, a frequent cause of catarrhal fevers, pneumonias, influenzas, and bronchial affections. It not unfrequently occurs, also, that the course of the wind has something to do with the prevalence of epidemics in certain countries, as in England, which has resulted in the quaint couplet,

> "The wind that bloweth from the East,
> Is good for neither man or beast."

But whatever might be the effect of these irregular meteorological phenomena, and, however difficult to arrive at correc conclusions in reference to them, we doubt not, those primary principles already mentioned, existing as they do, in constant, but variable quantities in the atmosphere, constitute the hidden arcama of disease—the Pandora's box, from which emanates most of the physical ills of human nature.

Oxygen is as much the principle of life, as it is of combustion. It is the great decarbonizer of the life blood, and generator of the life heat. But it requires a certain amount of oxygen, no more nor less, to produce these results properly, and carry on healthy respiration. Too little will not sufficiently neutralize the carbon of the blood, but suffer this poison to escape into the system, and produce stagnation and death; too much, surcharge the whole nervous as well as arterial system with bright florid blood, and results in a dissolution of the system, more or less rapid, according to the overplus of oxygen respired. Now, there are chnages constantly going on in the atmosphere, by which the amount of oxygen, in a given space is increasedor diminished, according to the rise or fall of the mercury in the Toricellian vacuum. When the barometer ranges high, near the point of 30 inches, the atmosphere is much more dense, and contains a greater amount of oxygen in each cubic foot, than when it ranges but little above 29 inches, as it does sometimes for days together. This variation in the condition of the air, in which "we live and move and have our being," must have much to do with the generation of disease, particularly those affecting the respiratory system. We remember some years since, to have treated a case of cardiac asthma, in which much interest was taken, as our diagnosis had been called in question. When there were no other existing causes to bring a paroxysm, we could, almost, always foretell the time of the attack, by the fall of the barometer. As the respiratory element of the atmosphere was diminished, the difficulty in respiration increased and *vice versa.* In fact it has long been known by physicians, and asthmatic patients themselves, that at the beginning of cloudy, damp weather, they are subject to attacks of the disease. Our own observation has taught us, that the very juncture in which all asthmatics are the worst, is when the barometer is the lowest, and there is the least oxygen in the atmosphere. The same principle has long since been elucidated in the ascent of high mountains, where the barometer falls one inch for every thousand feet, and respiration becomes more and more difficult, until in very high altitudes breathing is almost impossible, on account of the small amount of the same vital principle in the air.

The knowledge of these facts, might tend to institute a prophylaxis in preventing paroxysms of asthma which might relieve that class of patients from a great amount of suffering. When it is known that they need oxygen above all else, they will select for a permanent residence those localities, which have been ascertained by meteorological observation to possess the greatest amount of that principle—the seashore for instance, where the barometer ranges about 30 inches. And so of consumptives, whether in the first or last stage, there being a deficiency in the respiratory function, because of the contraction or obliteration of some of the air cells, it becomes necessary to seek an atmosphere where there is an excess of oxygen to aid this deficiency. And, I doubt not, it is owing to this fact that the seashore, in certain localities, has always been considered more efficacious in lung diseases than midland or mountainous regions, though the virtue has been supposed to exist in the salt air itself. The same remarks will apply to every class of respiratory diseases, especially, where dyspnea is an occasional concomitant.

It were perhaps unnecessary for us to attempt to prove that the degree and intensity of caloric in the atmosphere, has much to do with the etiology of disease. Hence there are diseases peculiar to the summer season, when there is an excess of heat, and others which prevail in the winter when there is a deficiency, and so in reference to cold and warm climates.—But mainly would we hope to be benefited by the study of meteorology in this connection by comparing the vicisitudes of atmospherical heat, as indicated by the range of temperature. Our observations have led us to the conclusion that several epidemics attributed to malaria and considered as endemical in their character are dependent upon sudden changes of temperature. We have no doubt that the continued fevers of the rural districts of the South miscalled Typhoid, are of this class. And it would not surprise us to find that many of the Phlegmasia, involving as they do the internal viscera came under the same general head. The *modus operandi* of such inflammations is easily explained upon this theory. During a warm spell of weather the spine is in a relaxed state, the mouths of the exhalents are open and upon a sudden change of temperature they become contracted, as also the capillary system of blood-vessels, the result is that an overplus of the fluids of the body is thrown upon the internal organs, and those suffer most which are in the weakest state. I doubt not many diseases are generated in this way and many chronic affections greatly aggravated. If then the range of temperature has so much to do with the origin of epidemics, how important it is for the profession to engage more fully in the science of Meteorology in connection with the prevalence of diseases in special localities, by which coincidences may be developed in such numbers as to establish by the most indubitable facts, the causes which operate in the production of disease.

The aqueous and electrical conditions of the atmosphere have we doubt not also much to do in originating certain diseases. Hence the Psychrometer or hygrometer may be called into service by the scientific physician, and the amount of humidity in the atmosphere, together with the force of vapor in inches, and the relative fraction of saturation be noted and compared with the statistics of prevalent diseases. By this process we doubt not that much light might be thrown upon certain morbid affections, particularly those of an endemical character. My impression is that malaria depends to a considerable extent upon the aqueous vapors in the air. A bad air is always a humid air. Hence chemists have never been able by the most minute analyses to detect any poisonous gases floating in the air where endemical diseases prevail. Possibly if they had sought for them in the aqueous particles of the atmosphere instead of the air itself, they might have been detected. Heat, moisture and vegetable putrefaction are supposed to be the generators of malaria. As it is not a gas it must be held in solution by the aqueous vapors of the air. This seems to be proven by the fact that at night when vapors are more prevalent, malaria is more intense. Hence an unacclimated person may pass through a malarious district without harm unless he tarries all night, in that event he is almost certain to take the fever; might it not be possible that well conducted hygrometrical observations in malarious districts, might tend to lift the darkness that envelopes the whole subject of the ætiology of endemical diseases. At least if the aqueous theory be true, it would teach the intensity of the poison held in solution by the amount of vapor in the air, and its claims to truth might be vindicated, by the comparative prevalence of malarious fevers during seasons of dryness or humidity as tested by the hygrometer.

In close connection with the humidity of the atmosphere, is its electrical condition, for the vapors which rise from the earth, are always positively electrified, and one of the most abundant sources of atmospherical electricity, is evaporation. By the electrometer the exact electrical state of the atmosphere may be ascertained both as to its character and intensity.—From the fact that this principle pervades all nature and is subject to such rapid variations, that it is intimately connected with animal and vegetable life, that it has to do not only with our physical but our moral and mental being, elevating or depressing the spirits according to the state of the nervous system, or even it may be energizing the process of thought, as acted on by the currents of electricity in the air, the candid investigator after truth is forced to admit that it has much to do with the developement of all that class of diseases in which the nervous system is implicated. Such being the case, how interesting would be the process for investigating the causes of disease by the actual statistical exhibit of their developement, in connection with the phases of electricity in the atmosphere as ascertained by the electrometer.

The limits of this paper will only admit of my introducing the plan, which in my opinion will be productive of the best possible results in the public hygiene, and the advancement of medical science. Already has the Smithsonian Institution made many valuable contributions to Meteorological science by the establishment of various points of observation throughout the country and the world, and we have but very recently received from them papers on the connection of Meteorology with agriculture, climatology &c. So exact have been the calculations made by this powerful calculus, as that isothermal lines have been drawn and maps made indicating the thermal and barometrical conditions of every part of the country. We would simply suggest that the Smithsonian Institution endeavor through their agents, to secure the concurrence of medical practitioners throughout the land to keep statistical records of the diseases prevailing in the localities where Meteorological observations are taken. Thus when a physician is sent for to a patient, let him determine fully the character of the disease and enquire well into its history; when he ascertains the exact day of its inception, let him note down that day, the name of the patient, disease &c. Thus in the prevalence of a particular epidemic of any kind, the conditions of the atmosphere will be ascertained by one class of observers, the cases of disease by another, and much light will necessarily be thrown on their etiology. The medical practitioners in any special locality might combine and have both classes of observations taken for their own benefit in the absence of any general observations of the kind.

We are already in possession of many statistical facts bearing on this subject, which we may hereafter offer to the public more in detail. Our present intention only being to direct the profession, and the Smithsonian Institution particularly, to a new and interesting field of scientific investigation, by drawing an outline of some of the general principles involved in this question. We must desist from prosecuting the subject any farther at present.

# ARTICLE II.

## *Observations upon the Physiology of Audition.* By A. M. Parker, M. D. of Campbell Co., Ga.

In tracing the distinguishing characteristics of animals and plants, the physiologist is forced to admit that conciousness belongs alone to the former, and again all animals however, inferior, are necessarily endowed with special sensation. All animals then may take cognizance of their own existence, and to some extent the external world, and may use the means they possess to perpetuate their existence and reproduce their species. Although the organs of special sensation in a number of classes have not as yet been detected, still it is rational to conclude that they do exist.

The oyster makes manifestations of its sensibility to light; yet no special organ of vision has been detected in that animal. Who but a naturalist or physiologist would ever have thought of looking in a grass-hoppers legs for its eyes? May not the vibrating cilia of a Protozoon possess in addition to their locomotive property, the property also of receiving and conveying sonorous vibrations to the sensorium, or have the sense of feeling, seeing, smell or taste? It is just and philosophical to conclude that all animals are endowed with the faculty of hearing; however the function may be performed, it is nevertheless the fulfillment of the design of the great Physiological Lawgiver, who never wrought in vain. As we ascend in the scale of animal existence the organ becomes more and more complex, till in man it arrives at its perfection. And thir complexity of contrivance in the ear of man is doubtless intended by the great Author of nature to give him a greater power of discriminating sounds than the rest of the animal creation.

It is to be regretted that all the researches of science in Physiology and acoustics have failed to furnish to the scientific world, a satisfactory theory in relation to the uses of the various parts, of the organ of hearing. It is not so with the eye. The manner in which the rays of light are let fall upon the retina so as to imprint the visual object is fully and satisfactorily exemplified in an artificial eye. And it was not without the laws of the refraction of light in different media that the laws of vision were explained. Here all the conditions could be imitated by art. And a like imitation of the conditions in the phenomena of sound will be requisite to explain all the uses of an organ of hearing. Neurological, nor Pathological nor comparative anatomical research, isolated or combined, will ever be able to solve the whole of the question without a further developement in acoustics. Sonorous vibrations have the most various directions and the most equal rate of succession, are transmitted by all media without modification, however numerous their lines of intersection; and wherever these fall upon the auditory nerve they must cause the sensation of corresponding sounds. Yet withal we have a theory which must pass for the true one till the true one is discovered. It is probable that the various parts are adapted each to receive impressions (speaking of the internal ear) of a particular character; for instance, the directions would be indicated by one part of the organ, the pitch of sounds by another.

The essential part of an organ of hearing is a nerve endowed with the peculiar property of receiving and conveying sonorous vibrations to the seat of consciousness. In some of the invertebrate animals, the nerve is distributed to a membrane lining a little cavity in the solid framework of the head without any external opening. The sound then can only be propagated through the solid walls. But in the higher forms of this apparatus there is a small aperture covered with a membrane upon which the external medium can at once act. Thus we see, in the cavity, the vestibule of higher animals, and in the membrane the fenestra ovalis. In the lowest byclostome fishes a single anular passage proceeds from the vestibule which may be considered a semi-circular canal and the auditory nerve distributed to its lining membrane. In the Lamprey we find such canals. Ascending higher, we find the three semi-circular canals. Otolithes are found in fishes and some rudiments of a cochlea. It is said that in several tribes of fishes, the organ of hearing has a peculiar relation with the air bladder, which appears to be intended for a similar purpose to the Eustachian tube of higher animals. In the true reptiles a tympanic cavity is added, and the chain of bones and a rudiment of a cochlea. In Amphibia, frequently no tympanic cavity is found. But when there is a distinct tympanic cavity, there is also a Eustachian tube connecting it with the fauces. The tympanic cavity in true reptiles possesses the fenestra ovalis and fenestra rotundum. In birds, the cochlea instead of being spiral, is nearly straight, and the tympanum communicates with the cavities of the cranial bones, and thus adds to the intensity of sounds by resonance. In all the mammalia, the internal ear is generally found upon the same plan as it presents in man. The Labyrinth in some of the higher Vertebrata, contains no Otolithes. In man we have then, the external ear, the meatus externus, the membrana tympani, the tympanic cavity, the chain of bones, the fenestra ovalis and fenestra rotundum, the vestibule, the three semi-circular canals and cochlea, which are the bony and membranous labyrinth upon which is spread the auditory nerve continuing to or from the brain which is the great seat of the mind and consciousness.

It is necessary to consider briefly some of the means by which sounds are propagated:

1st. By Reciprocation, as when two strings of equal size, length and tension are placed along side of each other, and one of them be sounded with a violin bow, the other will be thrown into reciprocal vibration.

2d. By Resonance, as when a tuning fork in vibration is placed upon a sound board, the latter divides itself into parts, each of which reciprocates and increases the sound of the tuning fork, though the sound board have no definite fundamental note, the same sound board acting equally well for a tuning fork of several degrees of pitch. But when a smaller body is used for resonance, it is essential there should be a relation between its fundamental note and that of the sounding body; otherwise, no distinct resonance is produced. Thus, if a tuning fork in vibration be held over a column of air in a tube of such length that the same note would be given by its vibration, its sound will be reciprocated. But if the sound of the air in the tube would by its fundamental note produce an octave below this, the sound will, by separating into segments, be that of resonance. Or the column of air may divide itself into parts so as to sound the 12th, 15th, 17th, 19th, 20th or 22d, each or all of these sounding at the same time in harmony with the fundamental note itself, and producing what is called "grave harmonies." It is upon the knowledge of these laws of acoustics that much of the beauty of harmony depends. And it exhibits too, that as the divisions of the musical scale are founded in nature, and not in the mere arbitrary rules of art, so is the organ of hearing in man wisely adapted to reciprocate and be delighted with the sounds of harmony or melody. Paganini, the violinist, was thus enabled to play regular harmonies upon a single string of the violin. Man is not the only animal that appreciates music. We have heard of a horse that seemed to take delight in hearing his master's violin.

3rd. Vibrations of Conduction are those by which sounds are ordinarily propagated; and these may be more rapidly through solids, next through liquids, next through æriform, and not at all through a vacuum, (Muller's experiments in Carpenter's Elements of Physiology.) The intensity of sound is greatly diminished in passing from a gaseous to a liquid medium; but if a tense membrane be between the one and the other, the sonorous undulations are communicated from the former to the latter with great intensity. This explains the process of hearing in those animals which receive the sounds in or through air, but have no tympanic apparatus. Sonorous vibrations are communicated without any perceptible loss of intensity from air to water when to the membrane forming the medium of communication there is attached a short solid body which occupies the greater part of its surface, and is alone in contact with the water; applicable to amphibia and animals living in air, but destitute of tympanic apparatus.

A small solid body fixed in an opening by means of a border of membrane, so as to be moveable, communicates sonorous vibrations from air on one side to water, or the fluid of the labyrinth, on the other, much better than solid media not so constructed.

The membrana tympani is rendered tense or lax by the reflex action of the tympani muscles; on the same principle it is supposed that the iris of the eye contracts or dilates according as the light is intense or not, and by this means the membrane can be made to reciprocate grave or acute sounds. It receives the sonorous vibrations and communicates them to the chain of bones and by these they are conducted more directly to the fenestra ovalis, but there is also at the same time a powerful resonance in the cavity of the tympanum which has an additional force by virtue of the mastoid cells. In this, not only the fenestra rotundum and fenestra ovalis are affected by the vibrations, but also the external walls of the labyrinth. No wonder that the fluid of the labyrinth receives the sonorous impulses, however slight, when it is considered what powerful means are at work in the communication of sounds.

It is supposed that the semicircular canals have for their peculiar function the reception of impressions by which we distinguish the direction of sounds, and that the cochlea enables us to estimate the pitch. But as these are merely hypothetical opinions, of which there is no satisfactory proof, it is deemed unnecessary to say more; nor is it probable that the more special functions of these will ever be discovered, except, perhaps by some experimenter, who must be familiar with the laws of sound, and must imitate the ear in all its physical parts.—Locked up as these are in the petrous part of the temporal bone, they are out of the reach of satisfactory experiment. The object of the Eustachian tube appears to be the maintenance of the equilibrium between the external and internal air, by which the vibrations are rendered free. It also serves the purpose of conveying away the mucus secretions from the tympanum by the vibrating cilia lining its mucus surface, to the cavity of the throat. The cartilage of the external ear which is continuous with that of the meatus, by the inequalities of its surface, reflects and conducts the sound; but this is more properly the function of the concha; by all these means, however, it is condensed and conducted to the membrana tympani. The functions of the meatus are three-fold: 1st to convey the sonorous vibrations directly to the membrane; 2d, the vibrations are conveyed along the walls by conduction; 3d, the air which it contains like all insulated bodies of air, increases the intensity of sound by resonance.

It is upon the application of the principles of sound or a knowledge of the laws of sound rather, that the stethescope is made. This instrument is intended to insulate or circumscribe a particular part of the body in auscultation, rather than to increase the intensity of sound, which it does but slightly if at all. It is a matter of wonder that even with our imperfect knowledge of acoustics, the instrument has not received a greater degree of attention, and, consequently of improvement. Why, with our knowledge of resonance may not an instrument be constructed by which the intensity of sound may be greatly augmented? Any such instrument that would materially assist the physician in forming his diagnosis of the viscera would be a rich boon, and would crown the inventor with immortal honor.

Sound is propagated through the air at the rate of 1142 ft. per second, while light is transmitted at the rate of 200,000 miles per second. While light therefore travels from the sun to the earth 95,000,000 of miles in eight minutes of time, sound would require (all contingencies removed) several years, say 13½ years in traveling the same distance. In this comparison we perceive at once that vision is affected ordinarily long before sound could reach the ear. With these phenomena every one is familiar in the ordinary occurrencies of life.

A slight impulse communicated to the auditory nerve, excites a momentory sensation of sound; but a series of such impulses is necessary to produce a musical tone, the acuteness or depth of which depends upon the degree of rapidity with which they are produced. A spring submitted to the action of a revolving toothed wheel will give a double impulse for each tooth that strikes it, and the graveness or acuteness is governed by the number of impulses, and not by the loudness or softness. The number of vibrations or impulses of a musical string is according to its length, M. Savart found by experiment that the range of acuteness or gravity of sounds or tones apprecia ble by the human ear was in the acutest, 24,000 vibrations pe second, and in the gravest tone 7 or 8 impulses per second.—In regard to the length of time which a sonorous impression remains upon the ear it is uncertain. M. Savart found that several teeth might be removed from the toothed wheel without any perceptible brake in the sound.

It would depend upon the natural or acquired acuteness or slowness in different individuals of their perception of sensory impressions, just as the rule varies on the same account in regard to vision. The power of distinguishing the direction of sounds and their distance also, is acquired by the attention which the mind involuntarily gives to certain variations in space, with which the young become more and more acquainted in proportion as the powers of voluntary motion and of mind becomes developed; and also, by the comparative loudness or softness of sounds with which he is familiar. The sensation or consciousness of sound occurs in the brain.

The subjective phenomena of sound have their origin somewhere in the substance of the brain or between it and the periphery, which are referred by the mind to the periphery, and the causes are frequently if not always obscure. On the first inhalation of sulphuric æther for its exhilarant effects, the writer of this experienced the delightful sounds of many tiny musical bells, which gradually died away as he imagined he sailed up without effort in the moon-lit air, whence descending back amongst his friends he alternated between high stepping and friendly manifestations till its effects wore off.

The distance at which sound may be heard depends upon the smallest amount of impediments, all of which being removed it can be heard over 100 miles. One instance of this is given in the history of the fatal siege of the Alamo, Texas.

The nearness of sound may be exemplified by irritating the short stiff hairs of the meatus. And painful loudness is felt when an insect encroaches in that sacred cavity. But encroachments of that character are much less frequent than they would be but for the unctious cerumen secreted by the follicles of the meatus and which is repugnant to the smell of insects. another instance of the nearness of sound, I conjecture, is the bursting of a bubble of cerumen and giving rise to "death-bell" as it is superstitiously called. Loudness of sounds may be borne with a much less degree of discomfort if there be no discord. Even in sounds moderately loud, discordant notes, by producing a jarring in the membrane, inflict pain and disgust, especially in a refined musical ear. Imagine twelve or fifteen locomotive engines in full blast, each whistle blowing its own note which discords with all the rest and you may have an idea of the painfulness of discord. It is more intolerable than the roaring cannon which may be heard ten times as far.—Another disagreeable sensation of sound is produced by scraping a dry reed with a knife, producing chilliness or "crawling of the flesh."

It would be interesting, and perhaps instructive to consider the usefulness of sound in its application to natural language, in man as well as the inferior animals. How the sounds with which man was familiar in his primeval state were gradually developed into natural or spoken language: how, by the use of hieroglyphics and signs, written language was developed. How "Young America's" were taunted by the "Old Fogies" of those olden times; how, despite those taunts, the improve, ments and developments in science, hitherto traditionary, became their own recorders in a written language; how then it became necessary for convenience sake that the essays of the learned were put in print; how, now language is made to get into the electric current to be silently conveyed to the opposite end of the telegraphic wire, where educated eyes are the ready interpreters; how, by these artificial sounds nation can converse with nation.

The majesty of sound was heard in chaos in the Creator's voice, when He said, "Let there be light, and there was light." Thus was *our subject* first honored, and thus was sound the honored agency of the Deity in the creation of that subtle agent about the nature of which philosophers quarrel. Ye philosophers cease your controversy about light, and tell me what is nervous influence? What is life? What is the soul of man? What is the resurrection? Ah! your reason may toil in vain! Look and bow to the Revelation of God. He hath power to take away your nervous influence with your natural life! But there is another influence, another life behind this, and mysteriously identified with it. It is that of the soul immortal. He that gave these and with them dominion over all the earth, hath power to reunite them in the Resurrection, element to element, function to function, if need be, atom to atom.

The superiority of man over the rest of the animal creation derives proof from a thousand sources. Whether we look at his superior anatomical structure, or the more complex and various powers of mind, or at the inmost recesses and capacities of the soul, all go to prove the truth of Revelation, where it is said that man is made in the image of God. Yet with all man's superior endowments, his wisdom is foolishness with God. And whether I behold man in his lordly domain, tilling the soil, navigating the ocean, or wielding the implements of art, scanning the depths of nature's laboratory, in the animal, vegetable and mineral kingdoms; or drawing out the long hidden mysteries of the heavenly bodies, where

> "Throughout the galaxy's extended line,
> Unnumbered orbs in gay confusion shine,
> Where every star that gilds the gloom of night
> With the faint tremblings of a distant light,
> Perhaps illumes some system of its own
> With the strong influence of a radiant sun."

In it all I but see a grand confirmation of the supremacy and glory of God.

## ARTICLE. III.

*Prolapsus Uteri.* By J. G. Westmoreland, M. D., Prof. of Materia Medica and Medical Jurisprudence, in the Atlanta Medical College, Atlanta, Georgia.

So diversified have been the views of physicians in regard to the true nature of this uterine displacement, that we are forced to conclude that very little is known of the pathological condition, or that the displacement is the result of disease of the uterus and its appendages, and may be found in different conditions of these organs. The latter, we may conclude, is a true solution of the difficulty. The uterus is maintained in its proper position by a healthy condition of the vagina, ligaments and the organ itself; and even then, in a subject of naturally lax fibre, sometimes slight displacements occur. As, then, the tendency of disease, such as chronic inflammation, ulceration, &c., in any part, is to destroy the tone, vigor and strength of the tissues implicated, it is reasonable to suppose that engorgement of the uterus, and the consequent irritation, inflammation and ulceration of this organ and the contiguous structures, will so destroy the natural tone and strength of those parts which support the organ in its normal position, that they no longer perform their functions properly, and prolapsus is the result. Again, any mechanical pressure from above, pressing upon the womb continually, may overcome the natural support, and bring about the precise state of things, so far as respects the position, as is found to exist from disease, as above stated. Indeed disease of these organs may be set up by such mechanical causes, concomitantly with the displacement; hence the great difficulty in many cases in determining the primary difficulty or source of the evil. One of the most fruitful mechanical causes of uterine disease and displacement, may perhaps be found in the habits of dress among females. I am frequently interrogated as to the cause of greater liability to uterine disturbance for the last few years than formerly, and am constrained to answer that the habit of suspending the most weighty of the clothing from the waist, subjects the abdominal and pelvic viscera to pressure in proportion to the amount of clothing thus worn, and from this cause the pressure is greater in the erect position, when the uterus from the force of gravitation is least calculated to resist it. The supposed increased frequency of female disease is accounted for in the change of the habits of that sex in other respects, such as exercise sleeping, &c. &c., but we find those who adopt the most approved hygienic course in these respects, not to any great extent exempt above those who subject themselves to a less enervating and tonic course of life. From whatever cause it may arise, there seems to be an increasing tendency to uterine disease, and in the absence of any change in the customs or habits of life among females likely to affect them in this respect, except that of dress, I can but conclude that to corsets and heavy skirts must be attributed the increased suffering in this particular.

From what has been said, it appears that the displacement which heads this article is only the result of other disease; but as this condition of the uterus, as regards position in the pelvis, has been set down among the catalogue of diseases, and as it has been thought of and treated under this name, it is proper to consider the causes of this displacement under it. Now, as the paramount consideration in the investigation of disease, is the palliation or cure, it is of the highest importance that the various remedies for Prolapsus should be considered in its treatment.

It would have been much better for suffering females had Prolapsus uteri never been entered in the catalogue of uterine diseases; for with the attention of the physician fixed exclusively on remedying the displacement; in the application of treatment, injury time and again has been done in those mechanical appliances intended to support the falling womb.

Suppose, as we have said, Prolapsus should result from chronic inflammation or other disease of the uterus, vagina or other neighboring parts, and to restore and keep in place the descended uterus, a pessary be placed in contact with the already irritated surfaces of these organs. Under such circumstances, does not every practical physician know that the radical disease from which the displacement has occured, will be aggravated? Pessaries, though useful in some cases of Prolapsus, are far from being admissible in a majority of instances, where this state of the organ is found. A support to the abdominal viscera, so as to prevent their weight upon the fundus of the uterus may be of more general use in uterine disease with a tendency to Prolapsus; for this may be instituted without detriment to the primary affection of the womb during its rational treatment.

# SELECTIONS.

From the N. O. Medical and Surgical Journal.

## *Influence of Anatomy on the March of Civilization*: By J. C. NOTT M. D., Professor of Anatomy in the University of Louisivna.

The science of medicine is so widely separated from the range of thought of the great mass of mankind, (even of those who have been liberally educated) that few, out of our profession, have any proper appreciation of the intimate connection which exists between its various branches and other departments of human knowladge, and a still smaller number have any idea of the immense influence the medical profession has exercised on the march of civilization. Could the people and their legislators be made fully sensible of the truths I propose to set forth, they would not hesitate to award to medical colleges, the credit which they justly merit. Few States in the Union have fostered these institutions with such liberal hands as that of Louisiana, and yet her people are already feeling benefits which will increase from year to year. But my object now is not simply to show that we are elevating the standard of medical education from year to year, and supplying the population with more intelligent and more skilful physicians, but that while we place the science of medicine on a more elevated platform, we, at the same time, elevate all other departments of knowledge with it. As my space will not permit allusion to other departments of medical education, as chemistry, botany, etc., I shall confine my illustrations simply to that of Anatomy, to which too little importance is attached by those outside of our profession, and I might add with truth, by too many in the profession.

So legitimately are all the departments of human knowledge connected together, that it becomes very difficult to estimate the full value of any one, or its influence on others, however disconnected they may seem. It may, however, be safely asserted that there exists no science, or no department of knowledge so isolated, that it does not receive light dircct or indirect from others.

It may be laid down as an axiom, that *all knowledgc is derived from the study of nature.* The mind of man comes into the world a blank, and would remain so were it cut off from the observation and study of objects of nature. Locke, in his immortal work on the understanding was the first to develope fully the great truth that all knowledge comes

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through our senses, for though the mind in its progress may develope certain abstract ideas, even these, if closely anaylsed, will be found to have their ground work in ideas received through the senses. Imagine a man who had never *seen* an object in nature—who had never heard a sound—who had never felt, smelt or tasted, and ask what abstract ideas his mind could originate, that would possess form or value. In fact, all our knowledge is the result of the action of our minds on materials derived from observation of the objects and phenomena of the external world. The boasted mind of man can *invent* nothing but *falsehood*—all science—all knowledge is but the discovery of facts of nature and their relations.—What, for example, is the noble science of astronomy? It is no *invention* of man. The master minds of Newton, Kepler, Laplace. Herschel, Leverier and others, have but *discovered* a few of the laws which have governed the celestial bodies for millions of years. So with mathematics, natural philosophy, botany, zoology, geology, chemistry, anatomy, etc.

Every proposition in Euclid is based on a law of nature. It was not Euclid that made the right angle of a triangle equal to the sum of the other two angles—or the square of the hypothenuse equal to the sum of the squares of the other two sides. When the chemist tells us that all substances in nature may be resolved into some sixty simple elements—that these may be recombined to form well known inorganic compounds; and that they combine in certain definite proportions, he only proclaims *discoveries* of beautiful laws of nature.

How stands the case with our own science of medicine? What are we daily striving at? Is it not simply to extend our *discoveries?* We seek with the dissecting knife and microscope to extend our knowledge of the structure of the human body. We seek to extend our knowledge of its functions, and the action of morbid causes upon it; and we seek in the vegetable and mineral kingdoms for remedies to heal its maladies. Every new splint the surgeon shapes, or new instrument he brings to light, is but an appliance to carry out a mechanical principle which exists in nature.

We may then, I think, fairly assume the truth of the two propositions thus briefly alluded to: First, That the mind of man commences its existence in darkness, and would remain so, were it not for the perceptions received through the five senses, which place us in relation with the external world. Second, All our knowledge is derived from the observation of nature, and the operation of our minds upon ideas so obtained.

If, then, it be true that the mind of man is enlightened and expanded by the study of nature, it is evident that the wide field covered by the science of anatomy must yield the richest of all harvests, and one well worthy of the great minds of Cuvier, Palas, Blainville, Geoffroy, St. Hilaire, Agassiz, John Hunter, Owen, Leidy, and many others, who have not only widely extended the horizon of speculative, but of useful knowledge.

You must not commit the grave error of thinking that the science of anatomy belongs to the doctor's shop alone. On the contrary, anatomy in its more general and philosophic acceptation, is the *Science of Organization*, considered in the different living beings, from the simplest zoophyte up to man. The series of organized beings forms an immense chain, the extent of which the accumulated labors of ages has not been able to measure. The air, the earth, the mighty deep are all populated by living beings, which, by their infinite variety of organization, form and size, attest the inexhaustible fecundity of nature. Thus while among the mammiffers life is maintained by the most complicated apparatus, we find at the other end of the scale, animals, like the hydra, polyps, etc., which have been alternately ranged with animals and vegetables. Nor are the varieties in size less striking, ranging from the mammoth or whale down to the animalculæ, a million of which the microscope discovers in a single drop of water. Even the animalculæ, so infinitely small to our senses, may in turn become gigantic, compared to others yet to be discovered with more perfect instruments.

You at once perceive then that anatomy is the most vast of all sciences—far too vast for any one mind. Hence the necessity of dividing it up into many departments, any one of which may fully occupy the lifetime of one man.

We shall proceed to point out in succession, the connection between anatomy and a few of the more prominent departments of human knowledge, viz: mental philosophy, fine arts, zoology, geology, jurisprudence, political economy, ethnology, natural and revealed religion, etc.

1st. Let us inquire what connection exists between anatomy and mental philosophy? Science is one thing—religion is another, and should in the present sensitive state of the public mind, be kept as much apart as possible, and it is not our desire here to make any allusion to the soul, or immortal part of man; but the *mind*, the *intellectual powers*, are clearly functions of that organ called the brain, and we should commence our study of the mind, by the *anatomical* structure of the organ from which it emanates. The mind is almost null in the new born infant—it grows and gains strength on to mature age—it is deranged by disease of the brain, and is annihilated by compression and other injuries. Every thing, then, proves that its intellectual functions depend upon the integrity of the anatomical structure of the *brain*.

through the mammalia, birds, reptiles, and fishes, we find that the brain becomes smaller and less perfect, one organ after another is diminished or left out, until in the lowest links but little brain and little intelligence is left. If we pass on from the *Vertebrata*, through the three remaining divisions of the animal kingdom, viz: *Articulata*, the *Mollusca*, and the *Radiata*, we shall find that not only the brain, but the entire nervous system disappear, and even the special organs of sense.

It is by anatomy, then, that the mental philosopher has been able to study and analyze the structure and functions of the nervous system. He can go back and commence almost at the worm, and by following on the chain upwards through fishes, reptiles, insects, and warm-blooded animals, discover that one organ after another is added, each of which has its special use, until he reaches such structures as the brains of Napoleon, Newton and Locke.

I have pointed out to you one of the great results of comparative anatomy. It is the ground work of mental philosophy, and no intellect, however gigantic, could ever trace the connection between mind and matter, without the dissecting knife and microscope.

Even sculpture and painting, those twin arts, that so charm the eye, refine the taste, and expand the mind of man, are not less indebted to the aid of anatomy for the high perfection to which they have attained in our day. A certain amount of anatomical instruction is now considered as essential in every school of design. What excellence could the historical painter attain, without a knowledge of those muscles of the face which give expression to the various passions and emotions of the mind; or of those of the limbs and trunk which give expression to the motions and attitudes of living man? The most beautiful object in nature to us, is the human form divine; who can gaze upon the Apollo or the Venus, the Laocoon, or the dying Gladiator, without the most pleasurable emotion; and they give us pleasure because they are true to nature. It may be said that the sculptors who produced these unrivalled works of art, lived in a day when dissections were not tolerated, and anatomy was in its infancy. In reply, we say, that we do not know with certainty even the names of many of the artists, and therefore can know little of their knowledge of anatomy; but we can say, whether they did or did not dissect, they studied the external anatomy of man with a fidelity which never can be surpassed; the swell and outline of every muscle, the eminences and depressions of every bone, the motions of every joint, every trivial furrow, every superficial blood vessel, or tendon, the irregularities of the skull, etc., were all depicted with a fidelity which can never be excelled. No one, then, will deny that anatomy is an essential element in the education of the sculptor and painter.

Need I now address myself to the intelligent jurist and ask him to turn to Paris and Fontblanque, Beck, Taylor, and other works on Medical Jurisprudence, and say how much he owes to the labor of the anatomist, to say nothing of medical chemistry? How often is the anatomist called before the coroner, or into courts of justice to determine a point of life and death. Questions of infanticide have often to be decided by the testimony of the medical man alone; in cases of death arising from blows, wounds, etc., it is the anatomist who is to decide, and upon his testimony alone, hangs, in many instances, the lives of human beings, and the momentous decisions of damning guilt or of innocence. But it would be almost an insult to intelligence to dwell upon a point so palpable as this.

Where shall I begin, or where shall I end, when I undertake to tell you of the connection between anatomy and the vast science of *Zoology?* What is meant by the term *Zoology?* It covers the entire physical history of every living being, and every fossil remain, from the animalculæ or zoophyte up to the most gigantic animal forms. Zoology, then, must necessarily have comparative anatomy for its ground work. Comparative anatomy not only examines into the minute structure of each organized species, but it is its province to compare them together, to study their affinities or discordances, to arrange them into groups having anatomical relation, and to open to our view that stupendous plan by which an All-wise Providence has populated and repopulated our globe. We have only to turn back to the works of Buffon to prove how indispensable is anatomy to the science of zoology. Buffon was a truly great and useful man in his way, and to the charm which his genius threw around Natural History, are we greatly indebted for the impetus given to its study during the past century. No man was ever more deeply impressed with the grandeur and beauty of Nature's works; no man ever searched more diligently for landmarks by which to classify and arrange the immense mass of material over which his mind wandered; and never did gorgeous and attractive style do more in awakening the attention of others to the study of Nature's works; but after all there was something wanting to give solidity and durability to his plan, and to elevate Natural History to the level of a true science. It was the want of *anatomy.*

When the naturalist of our day looks over the fifty volumes of Buffon, he marvels at the extent of his labor; is fascinated with his beautiful descriptions of the external forms of animals, their habits, instincts, geographical distribution, etc.; but when we seek for those solid materials out of which to construct an exact science, we turn to the labors of Daubenton, the modest, but gifted collaborateur of Buffon, who has left us dissections of nearly two hundred species of animals, so full and accurate as to leave nothing to be desired, as far as these details extended; but Daubenton attempted no complete classification of the animal kingdom.

Comparative anatomy, by leading us to an exact appreciation of the organic resemblances and differences presented by all animals, is now regarded as the sole solid basis of their classification.

It is to Cuvier that we are indebted for the first truly scientific classification of the animal kingdom, which is founded on the organization, and the principle of natural anatomical affinities. It follows the descending order, beginning with the most complex type at the summit, and placing the most simple at the bottom of the scale. He divides all known animals into two grand anatomical divisions, viz: the *Vertebrata*, or those having a spinal column, and second, the *Invertebrata*, or those having no spinal column. The latter are again divided into *Articulata*, *Mollusca*, and *Radiata*, and the whole animal kingdom is thus divided into four grand departments, which are based entirely on anatomical distinctions. If we go on down through the orders, classes, families, generations and species, we find that anatomy is still our guide, and the only means by which we can surely place each animal. It is only when well marked anatomical distinctions cease, that our doubts and disputes commence.

When, for example, you place beside each other, a bear and a dog, you discover anatomical differences which at once point to specific difference and distinct origin. But when you place beside each other the dog, wolf, fox and jackal, though they have some external differences, their anatomical structure is identical—they have the same number and form of teeth, the same number and form of bones in the skeleton, and the same internal organs; but, the comparative anatomist requires but a single bone or tooth of the bear to say that it is not a dog, or a wolf, or deer—but a bear, and nothing but a bar.

If the question be asked, "Are all horses of one species or origin?—are all dogs—all cattle—all our domestic sheep and goats of one species—nay, more, are all the races of men of one species? We are at sea without a compass. Anatomy ceases to guide us, and it is probable that such disputes will never be settled.

And what shall I say of the noble science of Geology, which strives to know the chronology and formation of the globe? It goes hand in hand with comparative anatomy, like sculpture with painting—in fact, organic remains are the hand-writing of the Almighty upon stone, by which he has revealed to the geologist all that we know of Preadamite history of

"Among the thirty thousand species of animals and plants found in the rocks, very few living species have been detected; and even those few occur in the most recent rocks, while in the secondary group, not less than six miles thick, not a single species now on the globe has been discovered. Hence the present races did not exist till after those in the secondary rocks had died."

Another very curious result of anatomical investigations is the fact, "*that the laws of anatomy have always been the same since organic structures began to exist.*"

"It has long been known that the organs of animals were beautifully adapted to perform the functions for which they were intended. But it was not till the investigations of Baron Cuvier, within the last half century that it was known how mathematically exact is the *relation* between the different parts of the animal frame, nor how precise are the laws of variation in the different species, by which they are fitted to different elements, climates, and food. It is now well known that each animal structure contains a perfect system of *correllation,* and yet the whole forms a harmonious part of the entire animal system of the globe.

To use the language of Cuvier: "Every organized individual," says he, "forms an entire system of its own, all parts of which mutually correspond, and concur to produce a certain definite purpose, by reciprocal action, or by combining towards the same end. Hence, none of these separate parts can change their forms without a corresponding change in the other parts of the same animal, and consequently each of these parts to which it has belonged. Thus, if the viscera of any animal are so organized as only to be fitted for the digestion of recent flesh, it is also requisite that the jaws should be so constrected as to fit them for devouring prey; the claws must be constructed for seizing and tearing it to pieces; the teeth for cutting and dividing its flesh; the entire system of the limbs, or organs of motion, for pursuing and overtaking it; and the organs of sense for discovering it at a distance. Nature must also have endowed the brain of the animal with sufficient instinct for concealing itself, and laying plans to catch its necessary victims." This is the picture of a carnivorous animal, and the same adaptation of structure and instincts to mode of life will be found in the herbiverous and all others, large or small, perfectly or imperfectly organized. "Hence," says Cuvier, "any one who observes merely the print of a cloven hoof, may conclude that it has been left by a ruminant animal, and regard the conclusion as equally certain with any other in physics or in morals. Consequently, the single foot mark clearly indicates to the observer the forms of the teeth, of all the leg bones, thighs, shoulders, and of the trunk of the body of the animal which left the mark.

"By thus employing the method of observation, where theory is no longer able to direct our views, we procure astonishing results. The *smallest fragment of bone*, even the most apparently insignificant apophysis, posseses a fixed and determinate character relative to the class, order or genus and species of the animal to which it belonged; insomuch, that when we find merely the extremity of a well preserved bone, we are able, by a careful examination, assisted by analogy and exact comparison, to determine the species to which it once belonged, as certainly as if we had the whole animal before us.

Cuvier first fully tested this law of correllation of parts, in existing animals, but it remained for him to apply the same principles to remains of fossil animals. It was certain that if the laws of anatomical structure were the same in the pre-Adamite creations, as they are now, the above principles must apply equally well to the bones found in the rocks, and though often only scattered fragments are brought to light, the anatomist would be able to *reconstruct* the whole animal, and present him to our view.

The quarries aroundParis had furnished a vast number of bones of strange animals, and these had been thrown promiscuously into the collections of the city. Cuvier determined here to put his principles to the test amidst this huge and confused mass of fossil remains. "I found myself," says he, "as if placed in a charnel house, surrounded by mutilated fragments of many hundred skeletons, of more than twenty kinds of animals, piled confusedly around me. The task assigned me was to restore them all to their original position. At the command of *comparative anatomy*, every bone, and every fragment of a bone resumed its place. I cannot find words to express the pleasure I experienced in seeing, as I discovered one character, how all the consequences which I predicted from it were successively confirmed; the feet were found in accordance with the characters announced by the teeth; the teeth in harmony with those indicated beforehand by the feet; the bones of the legs and thighs, and every connecting portion of the extremities, were found to set together precisely as I had arranged them, before my conjectures were verified by the discovery of the parts entire; in short, each species was, as it were, reconstructed from a single one of its component elements."

Here, then, we have demonstrated, by the light of anatomy, that the same laws of life which now prevail in the world, have existed through a succession of creations, through thousands, tens of thousands, and probably millions of years.

Organic remains, too, teach us that there have been, in the remotest geological epochs, viviparous as well as oviparous creatures, and gemmiparous as well as fissiparous animals and plants. They were also carnivorous, herbivorous, and omniverous animals; they posses the same internal organs as animals of our day and they were governed by the same physiologibal laws as those of the present day.

What a wonderful achievement it is for anatomy, that it should thus have exhausted the existing Fauna of the earth, and have followed up, step by step, the foot-prints of the Almighty, through this plan so vast in time, so gigantic in extent, and so infinite in wisdom!

Nor is anatomy without intimate connections with both natural and revealed religion. Of the latter, I have not time or inclination to speak here; but what need is there of volumes on natural religion with facts before us like those I have presented. No sane man could follow this long chain of organized beings through creation after creation, through those countless ages of time, could reflect on that plan which has been working with such harmony from beginning to end, and doubt there is a Supreme and Overruling Intelligence, and that we are responsible to him, and him alone, for our acts in this world.

Had we time, I could easily show you to what extent even physics are indebted to anatomy. The human frame is a beautiful machine, from which the mechanic arts have received many useful lessons. It is a system of levers, fulcrums, pulleys, admirably arranged for motion and strength. The celebrated Kipler devoted much study to the structure of the eye. It suggested to the mind of Euler the possibility of achromatic lenses, and the whole science of optics has gained much from the study of the eye. Of like importance has been the anatomy of the ear, on which is based the science of acoustics.

I will conclude by calling your attention for a few moments, to one point more, and not the least important, viz: the connection between anatomy and ethnology.

When we cast our eyes over the broad surface of the globe, and behold the endless variety of human beings which inhabit it, of every shade of complexion, of the most opposite physical conformation, and of the most diverse moral and intellectual characters; I say, when we look upon all this, in spite of the influence of early education, we are driven to ask ourselves the question, "Are these races of men of one parentage, and are they alike capable of moral and intellectual cultivation?" The *origin of man* is a momentous question, one which has elicited much discussion among the wisest heads, and is one which I shall not touch here; but still the physical history of man has certain important connections with the view of anatomy I am now placing before you, which render it impossible for me to pass it by in silence, without doing manifest injustice to the science of anatomy, which it is my duty to teach.

Of the precise epoch at which man was placed on the earth, we know nothing. The short chronology of Archbishop Usher, of six thousand years, is now abandoned by every well informed writer in the church and out of the church; it may be ten thousand, twenty thousand, or one hundred thousand for ought we know. Nor can we divine how far back such well marked races as Jews, and other white races; Negroes, Mongols, Hottentots, Australians, Indians, Malays, etc., etc., first made their appearance. This much, however, has been positively demonstrated through evidence derived from Egyptian, Assyrian, and Chinese monuments and records, viz., that the Jews and other white races, as well as Negroes, Egyptians, Mongols and other well marked types of man existed at least five thousand years ago as distinct from each other as they now are; and it is equally certain that these forms have, during this long period, been permanent and unchanged by climate or other existing physical causes; no race during this time has been transformed into another, whatever miracles may have been performed in earlier ages.

We not only have evidence of the existence of distinct races from the Bible, Homer, Herodotus and other early writings, but we have actual portraits of races, on the monuments of Nineveh, Babylon, and Egypt, dating back several thousand years. Nay, more, if all this were not sufficient, we have other overwhelming evidence of the antiquity of races.—We have the mummies of Negroes, Jews, and other races taken from the ancient catacombs of Egypt, which place the question at once in the hands of the anatomist. We have other human remains from the barrows of Britain and Germany, from the mounds of America, from the ancient burying grounds of Mexico and Peru, from the ruins of Nineveh, from the bone caverns and other sources, all of which give to the anatomist ample material for proving the *permanency* of types through all known physical influences, and all known time.

When these different races of men are brought together and compared *anatomically* they are found to differ quite as widely in structure, as do the species in most of the genera of animals. Compare, for example, the skeletons of the African Negro, and the Anglo-Saxon, and I do not hesitate to assert that they differ as much as those of the polar and tropical bears—the horse and the ass—the dog and the jackal, or the lion and tiger; but we shall call your attention to but one anatomical point by way of illustration. I will select the brain, as it is the organ of intelligence, which should form the most striking and satisfactory point of distinction.

The lamented Dr. Morton, of Philadelphia, who has done more in this department of anatomy than any other man, collected and measured accurately more than one thousand skulls of various races. Since his death, his collection, which has been deposited in the Academy of Sciences, of Philadelphia, has been considerably extended, and has been re-measured by Dr. Meigs, with the same results. It has thus been ascertained that not only do the races show a great variety of forms in the external configuration of the skull, but a marked difference in the size of the brain. If we compare together the two extremes, viz., the Teutonic and North European races below the Arctic, with the Hottentot of the Cape of Good Hope and the Australian, we find the former have seventeen cubic inches more of brain than the latter; if then we take the Mongol races, the Malays, the Negroes of tropical Africa, the American Indians, and other races, we shall find that there exists a gradation between the two extremes, and that anatomy assigns to each its proper position in the scale.

Nor is it less certain that the large-headed, fair-skinned races have been the rulers of the world and the depositories of all true civilization. The Mongol races, who have brains intermediate in size between the white and black races, have long since achieved a semi-civilization beyond which they cannot rise; while the intellects of the darker races have remained as dark as their complexions. From the Barbary States to the Cape, no race has ever invented an alphabet—no manuscript or tablets have been found to tell their rude history, and no architectual remain has been found to mark a bright spot on the five thousand years, during which we know they have existed.

Now, *when* did this great inequality of the races begin? Of this we know nothing, but the great practical fact remains that it has existed for several thousand years, and we have every reason to believe that it will remain till these races are extinct. We have shown that both anatomy and history prove that the physical cause now in operation on earth has not been able to transform one type into another.

There are well meaning philanthropists who talk to us about the influence of education and sing hosannahs over the wonderful results which are flowing from the colony of Liberia, and the efforts of Missionaries in civilizing these inferior races. Anatomy teaches us that it is impossible, as history has before done, until you can fall upon some plan by which seventeen cubic inches of brain can be added to that of the Hottentot, the Bushman, or the Australian, you cannot add to his intellect, or his capacity for civilization. I have examined this question with a great deal of care, and can find no facts, or evidence whatever to show that education can enlarge the brain. We know that the muscles of the arm of the blacksmith will enlarge by the constant use of the hammer, but when did thought ever increase the size of the brain, any more than vision does that of the eye, or hearing the nerve of the ear? There is no analogy between the actions and functions of the nervous system, and those of the muscular system.

The brains of royal families—of nobility, which have been educated classes for centuries, have no larger heads than the lower classes. Educated communities have no advantage in this respect, over the uneducated. The ancient Britons and Germans had the same skulls as their more civilized descendants. The heads of Napoleon, Newton, Shakespeare and Locke were as large at the age of sixteen as at fifty. In a word, there is no more evidence to prove that you can change the size and form of head in a race, than that you can change the form of a negroe's foot, his pelvis, his thick lips and nose, his black skin and wooly hair. These are anatomical peculiarities stamped on him by his maker at some time unknown to us, and nothing short of the miraculous interference of the same power can change his anatomical structure. Anatomy thus teaches us a great practical fact and one which should be well understood, by the statesman the philanthropist and the theologian. We must take the works of God as we find them, and not suffer ourselves to be misguided by Utopian schemes. As Knox quaintly said, you cannot change an Irishman into an Englishman by act of parliament.

But it is time that I should draw this rambling essay to a close. The subject is sufficiently extensive for volumes, and if I have succeeded in directing thought to the value of anatomical studies my aim is fully met

It must be clear to any one who takes the trouble to investigate the subject, that anatomy has, from the time of Aristotle to the present day, exercised a controlling influence over many departments of human knowledge, over the progress of civilization.

Read the history of the world and you will find that medical colleges have ever been the foci around which have clustered the whole circle of natural sciences.

# *Lecture on the Nervous Structures and the Action of the Heart.*

Being one of the Lumleian Lectures read before the Royal College of Physicians, March, 1857. By Robert Lee, M. D. F. R. S.

I now proceed to relate the circumstances which led to the discovery of the ganglia and nerves of the heart, which enable us to solve the problem of the heart's motion or action. Soon after the uterine system of ganglia and nerves had been demonstrated in 1838, I began to reflect on the analogy which exists between the structure and physiology of the uterus and heart, both powerful involuntary muscular organs, yet greatly under the influence of the brain and all the organs of the body copiously supplied with nerves. It was impossible to avoid coming to the conclusion, from all the phenomena of the heart's action, that it must be endowed with a great system of ganglia and nerves, similar in some respects to those of the uterus, which had not been discovered. I felt the strongest desire to know whether, if the heart, did possess ganglia and nerves like those of the uterus, these nervous structures would be found enlarged in hypertrophy like those of the gravid uterus, and whether those of the left ventricle would be found larger than those of the right, and if the auricles were supplied more copiously than the ventricles.

The constant pulsations of the heart from the commencement to the close of life evidently required a far greater supply of nervous influence than had been represented in the works of the most celebrated anatomists. The heart acting many hours in some creatures after being cut out of their bodies: portions of it contracting rhythmically, as it is called when the heart had been cut in pieces; its movements when they had nearly ceased being roused by galvanism and mechanical irritation; the effects of stimulants and narcotics on the contractions of the heart; the circulation having been carried on in the most perfect manner through the placenta, and all the viscera of a fœtus, which I had seen born without brain and spinal cord; the symptom in cases of angina pectoris, and sudden death from organic diseases of the heart; the sympathy which exists between the heart, the lungs, stomach, liver, intestines, and above all the uterus; no explanation could be given of all these circumstances without supposing that the heart possessed great nervous centres which had never been seen, and never before suspected to exist.

I had often put this question to the most distinguished anatomists and physiologists—From what source does the heart derive its sensitive and contractile powers? but no satisfactory answer was ever received. I urged several anatomists to undertake the investigation of the nervous structures of the heart, and assured them if they did so that their labor would not be lost. At last I induced one to undertake the task. When a year had elapsed I went to see what progress had been made, and found that he was just on the point of commencing—of breaking ground; the serous membrane had not been removed from the surface of the human heart.

On the 23rd of April, 1846, an accidental circumstance occurred which made me determine to undertake the the labor myself. On that day I went into the library of the Royal Society, where I found the president, a professor of physiology, and a microscopical anatomist. A warm discussion immediately commenced respecting the nervous structures of the uterus, when it was asserted that the uterus did not require such ganglia and nerves as I had described and represented in the Philosophical Transactions, because the heart had no ganglia and few nerves. I inquired of the professor who made this assertion, if he had ever dissected the nerves of the heart, and the reply was that he had never done so; but in support of the truth of what he had affirmed, I was referred to the plates of Scarpa and of Swan, in which you see the muscular structure of the human heart is represented as almost entirely destitute of nerves, from which it might be inferred that the action of the heart did not depend upon nervous influence.

Having procured the heart of a child six years of age, that had died of disease of the brain in St. George's Hospital, and having removed all the blood by immersion in water, it was covered with strong alcohol, and on 12th September, 1846, I proceeded with these small forceps and needles, and this dissecting lens, magnifying six diameters, to see what could be discovered. In a few hours the serous membrane was removed; underneath were seen numerous branches of nerves with ganglionic enlargement wholly unconnected with the coronary arteries, ramifying on the surface, and plunging into the muscular substance of the heart. These were traced to the base, and found to terminate in a great ganglionic plexus, situated between the pulmonic artery and aorta, into which branches from the par vagum, recurrent and sympathetic, entered. The same evening I showed these ganglia to Mr. Wharton Jones, and begged him to compare them with the plates of Mr. Swan. He saw the whole surface of the left ventricle, from the base to the apex, covered with an immense plexus of ganglia and nerves. It was now obvious that the ganglia and nerves of the heart had been overlooked as much as those of the uterus, and that no argument against the existence of the ganglia and nerves of the uterus, which had been demonstrated to exist, could be drawn from the assumption that the heart had no ganglia and few nerves.

The investigation thus commenced was continued without interruption till the month of May, 1847, when I had made dissections of the ganglia and nerves of the healthy and malformed fœtal heart, of the hearts of birds, of the heart of the child at the ages of six and nine years, of the heart of the adult in the sound state, of the human heart slightly and greatly hypertrophied, and of the heart of the young and adult heifer and horse. These dissections warranted me in drawing the following general conclusions:

1. That the blood vessels and the muscular structure of the auricles and ventricles of the heart are endowed with numerous ganglia and plexuses of nerves, which have not hitherto been described or represented in the works of other anatomists.

2. That the nervous structures of the heart, which are distributed over its surface to the apex, and throughout its walls to the lining membrane and columnæ carneæ, enlarge with the natural growth of the heart before birth, during childhood and youth, until the heart has attained its full size in the adult.

3. That the ganglia and nerves of the heart enlarge like those of the gravid uterus, when the walls of the ventricles are affected with hypertrophy.

4. That the ganglia and nerves which supply the left ventricle are more than double the size of the ganglia and nerves distributed to the right side of the heart.

In prosecuting this investigation into the nervous system of the heart, I found that the great difficulty of dissecting and displaying the ganglia and nerves did not arise so much from their extreme softness, from their close and intimate connection with the blood vessels, or from the quantity of adipose matter in which they were imbedded, as from the presence of a dense fibrous membrane or fascia, which was interposed between the serous membrane and the muscular coat, of whose existence as a distinct tissue of the heart I had no knowledge when these researches commenced. In the most recent systematic writers on anatomy, the heart was represented as consisting of muscular and tendinous structures, blood vessels, nerves and absorbents, enclosed between two serous membranes.

On examining this fibrous membrane after the removal of the serous covering, it is found to be possessed of great strength and firmness, glistening, semi-transparent, and resembling, in all respects, the aponeurotic expansions, or fasciæ covering muscular organs in other parts of the body. It is much stronger over the ventricles than the auricles, and it adheres so firmly where it is in immediate contact with the muscular sub-more firmly than to the pulmonary artery. This is the nervous plexus between the pulmonary artery and aorta described by Falopius more than three hundred years ago. Into this great nervous mass, which enlarges as it passes to the base of the ventricles, branches of nerves enter from the par vagum, recurrent, and sympathetic nerves. From the par vagum or recurrent and great sympathetic, branches pass to the heart behind the aorta or pulmonary artery; but the great ganglionic mass of nerves situated between the aorta and pulmonary artery is properly the root of all the cardiac nerves and ganglia. From the right side of the ganglionic mass, several broad, flat branches of nerves, invested with a soft neurilemma, and accompanied by small blood-vessels, proceed to the right auricle, right ventricle, and to the septum between the ventricles. From the left side of this nervous mass, under the arch of the aorta, several large, flat nerves, likewise enveloped in a neurilemma, and accompanied by small blood vessels, proceed to the left auricle, left ventricle, and the inter-ventricular septum. These large, flat nerves pass to the root of the left coronary artery, which they not only completely surround like a sheath, but likewise cover a portion of the aorta near its origin. Many large branches of nerves with ganglia formed upon them, accompany not only all the branches of the coronary arteries to the apex, but all the branches which pass into the muscular substance of the ventricle, and are distributed throughout its walls to the lining membrane and columnæ carneæ. From the deep nerves and ganglia of the ventricles, the muscular structure is chiefly supplied. From the great mass of nerves situated around the roots of the coronary arteries and the aorta, there are numerous branches of nerves with ganglia distributed over the muscular walls of the ventricles of the human heart, which do not accompany the blood-vessels.

On the portions of the ventricles which are devoid of fat, those ganglia and nerves are distinctly visible to the naked eye, through the serous membrane and cardiac fascia, and present a very remarkable appearance. These superficial cardiac nerves are remarkably soft, flat, and somewhat semi-transparent, as Scarpa has described, with a grey color, and the smaller branches are enveloped in a soft sheath or neurilemma, which has been regarded by all anatomists as an essential constituent tissue of the nervous structures. Towards the left side and apex of the left ventricle, these nerves lie in grooves or depressions in the muscular substance, and they spread out into ganglionic enlargements, from which laterally innumerable small filaments are sent off to the coats of the blood vessels which sink deep into the substance of the heart. It can clearly be demonstrated that every artery distributed throughout the walls of the uterus and heart, and every muscular fasciculus of these organs, is supplied with nerves upon which ganglia are formed, and which are the sources of all their contractile powers.

The preparations of the ganglia and nerves of the heart from which this description has been drawn, and the engravings from the Philosophical Transactions, are now placed before you. With the dissecting lens the ganglia and nerves are far more distinctly seen than with the naked eye. There is a very correct drawing of the ganglia and nerves of the heart of the race-horse, not engraved. (Placed also upon the table.)

This anatomical demonstration of the ganglia and nerves of the muscular substance of the heart completely overthrows the last remaining argument employed by those physiologists who still defend the doctrine that the irritability and contractility of muscular fibre are independent of nervous influence. This demonstration of the existence of numerous ganglia on the surface and throughout the walls of the heart, further clearly indicates the source of the actions of the heart as an entire organ, and how its detached parts can continue to contract after its total separation from the body. It likewise furnishes a satisfactory explanation of all the phenomena observed in the progress of all the functional and organic diseases of the heart.

The circulation of the blood could not have been carried on and life maintained, if the auricles and ventricles of the heart had not alternately contracted and relaxed as they do. Before these ganglia and nerves of the heart were demonstrated, it was impossible to explain the cause of this action or motion of the heart. By some this has been referred to the influence of the brain or spinal cord, while others believed that the contractions of the heart did not depend upon nervous influence. It must now be evident that there is nothing in the action of the heart more mysterious than in the action of the diaphragm and intercostal muscles, and all the muscles connected with respiration and digestion, the larynx, pharynx, œsophagus, stomach, intestines, bladder, uterus, and all the other voluntary and involuntary muscles of the body; the sensitive and contractile powers of the whole muscular system being derived from the nervous structures with which they are endowed, and which are all intimately connected with the brain and spinal cord,—constitute, in fact, one great system.

**From the New York Journal of Medicine.**

*Report of the Proceedings of the Medical Societies of New York.*

## NEW YORK ACADEMY OF MEDICINE.

REGULAR MEETING, DEC. 2, 1857, DR. MOTT, *President.*

### PUERPERAL FEVER.

DR. A. CLARKE said:—That as much time had elapsed since he was first honored with the attention of the Academy on this subject, he would take the liberty of recapitulating the positions he had taken in regard to the nature of puerperal fever. He had expressed his concurrence in the views of those who believe the disease to be contagious, and had spent a little time in considering the different doctrines relating to the means by which the contagion is conveyed from one person to another. He had stated that in his belief the disease is composed of two elements, a fever and an inflamation. In this respect, it resembles the epidemic dysentery, the epidemic erysipelas, or small pox. He had already stated that in the epidemic erysipelas which prevailed in New England, and in the western States, from seven to ten years ago, these two elements were as clearly distinct, in the time of their developement, as they are in small pox. A febrile movement, lasting a variable time, attended by swelling of tonsils, and of the superficial and deepseated glands of the neck, preceded the grave inflammatory lesion; and when this latter made its appearance, one, two, or three days after the fever commenced, it was an erysipelas of the head and face, of the lower extremities, the body, side, or arm; or it was pleurisy without any external inflammation, or a peritonitis, or indeed, almost any internal inflammation. In lying-in women, and those in the puerperal state, it assumed the form of puerperal fever. In these various modes of developement, it seemed as if the same poison was demonstrating its morbific power bylighting up a fever first, and kindling an inflammation afterwards, the double effect of one agent. He had expressed his belief that the fever of the puerperal disease was just as certainly followed by inflammation, as the fever of small pox is followed by an eruption, complete or incomplete; and as the fever of small pox never endangers life till the eruption, or some modification of it occurs, so he believed the puerperal disease is never fatal, but by the aid of its inflamatory element.—These comparisons, however, illustrate nothing more than the compound nature of this fever, the succession in the two leading elements follows a very different law; for while small pox fever requires two days to reach its eruptive stage, and epidemic erysipelas one to three days to reach its inflammation, the puerperal fever, like epidemic dysentery is followed promptly by its local lesion, commonly in a few hours, often in one. He believed in the communicable character of the disease, and this independent of other reasons would almost compel him to believe in its febrile nature. He believed in the inflammatory lesions, because their constancy is testified to by every accredited observer, except in a few rare instances.

These rare instances were the cases, which, in the belief of Simpson, Gooch, and others, were without lesion of any kind—a simple fever, the poison of which overwhelmed the vital powers. It was his object, on a former occasion, to show that these cases were no exceptions to the general rule, but that they were really marked by inflammation, like the others, but that the inflammation was one that had escaped detection, that it was an endometritis, and that the inflammation affecting the inner surface of the uterus, involved the open or valvular mouths of the uterine veins, and might produce purulent contamination of the system while no pus was found in the veins themselves after death. The evidence of this was in the inflammatory exudation on the inside surface of the uterus; the redness of the uterine structure, penetrating a minute distance from within outward; the symptoms of pyæmia, and the discovery of pus in distant organs. To present this idea was the chief object of his former remarks, and to give it distinctness, he had referred to and recognized the then commonly described inflammatory lesions, viz., the peritonitis, the purulent phlebitis in the uterine sinuses, and the purulent inflammation of the uterine lymphatics. These, together with endometritis, he had stated were the primary *inflammatory* lesions, and that there were other organs subject to inflammations, in a subordinate and secondary degree.*

These were some of the views that he had presented at a former meeting, and he recapitulated them now to correct any erroneous impressions which might be formed from the condensed report of his remarks published in the medical journals.

He could hardly open this subject for the further exposition of his views, without first noticing some of the statements made by Dr. Barker when the topic was last entertained by the Academy.

Dr. Barker urged that puerperal fever is a zymotic disease. So, perhaps, it may be, but Dr. Clark did not like the term, and was not in the habit of using it, because it is vague and of uncertain import. As commonly applied, it means, he said, all endemic, epidemic, and contagious diseases; and in this latitude of usage it had been made to embrace the most dissimilar affections. He had looked into the annual report of mortality in this city for the year 1842, prepared by our learned and industrious fellow-laborer, Dr. Griscom, much the best report that has ever issued from our City Inspector's office, and he finds there that the diseases usually called zymotic, are the miasmatic, typhus, and typhoid fevers,—erysipelas, small pox, scarlet fever, and measles, thrush, cholera infantum, croup, dysentery, diarrhœa, hooping cough, influenza, and syphilis. He finds that our Boston friends, in preparing the valuable mortuary reports of Massachusetts, use the term, and spread it over precisely the same ground; while puerperal fever is carried far off into another section, and appears among the diseases of the organs of generation. This he discover is the general usage of those who are attached to the word. By this very breadth of meaning, the term becomes vague and uncertain, and therefore objectionable. Should there be a disposition to use it in a stricter and narrower sense, as applicable to those diseases which reproduce the poison which causes them—in other words, strictly contagious diseases—in respect to the old idea that these diseases implied a fermentive process within the system, there would probably be less objection to the term, though even then it should be admitted into the medical language as a figure of speech, and in deference to the fathers. If the term, as used by the gentleman, means simply a contagious disease, Dr. Clark wa ready to subscribe to his opinion; but, for the sake of precision, he was compelled to prefer the words, contagious and communicable, to zymotic.

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* In making this classification of the inflammations, Dr. Clark did not mean to say that they were the earliest evidence of the morbid impression made upon the system; he meant to state simply, that among the inflammatory changes, those in the peritoneum and uterus were first in time and importance.

Dr. Barker had taken the occasion, he said, to speak somewhat disparagingly of the study of pathological anatomy, as if it limited our view of disease, and taught us to disregard its general history. To this Dr. Clark would reply, by pointing to what pathological anatomy had done, and the rank which pathological anatomists hold in our profession. Nobody could doubt that the immense improvements in medical diagnosis and practice, which distinguished the present century from all that had gone before it, the discovery of new diseases, and the advantageous changes in the treatment of affections long known, were to be set down to the account of this branch of study, more than to that of all others put together. New York physicians had gained the reputation of excelling their brethren in most other cities in the art of diagnosis. If they deserved this reputation, it could be attributed to nothing so much as to the general cultivation of pathological anatomy, and the reflection which that study suggests. The Pathological Society, with its profusion of means, and by its calm deliberations, and its constant reasonings from morbid appearances in the dead to symptoms in the living, was a constantly recurring lesson to teach the profession not only what this study is worth, but to inform them what phenomena in life are not illustrated by the revelations of the scalpel, and also to keep alive a love for this pursuit by a demonstration of its advantages. In this respect it is far the most useful of our public societies, and who will venture to say that it has narrowed our view of diseased action, or turned us away from the proper consideration of the morbid agencies which work unseen, but fatally, leaving few intelligible footprints?

Morbid anatomy contemplates what it cannot demonstrate to the eye, no less than the obvious changes of structure.

If we look through the catalogue of distinguished names that grace our profession in the present age, we shall find that with scarcely a single exception, they are the names of pathological anatomists, and that the foundation of their distinction is laid on this study. Brodie, and Velpeau, and Nelaton, Andral, Chomel, Louis, and Trousseau, had been nothing if their intelligence and zeal had not induced them to follow their fatal cases to the dead-house; and certainly it will not be said that these men have contracted their perceptions, and have been led to disregard any recognizable morbid agency by these pursuits. On the contrary, any just study of men must compel us to the conclusion that the same zeal which urges to the laborious use of the scalpel, is the parent equally of that industry which gives the largest and widest views of disease in all its relations.

But we are told that an appeal to the *post mortem* appearances can hardly be allowed, because the observer is likely to come with his mind preoccupied with the idea that he must find some change of structure to show for every disease. This at least seems a fair construction of the objection taken, that "pathological anatomy has led to exclusive solidism in medical doctrines." Is this really so? The present century illustrates the influence of pathological anatomy on professional opinions. Post mortem examinations were rarely obtained, or even asked for, till the time of the French revolution. Fifty years ago, the doctrines of Cullen, or rather a solidism more exclusive than his, possessed the whole medical mind. Humoralism could hardly be said to have had an advocate. Even as late as 1830, Cullen reigned. In 1835, he (Dr. Clark) was born into the profession, a solidist. Almost all the senior and middle aged men, who now complimented him with their attention, were baptized into the same faith. And where are the exclusive solidists to-day? The very phrase is obsolete, or if not, is known only to mark a period in the history of medicine. Every man's opinion has undergone a change; and pathological anatomy has effected this change. Aided by chemistry and the microscope, it has shown us, both by its positive and its negative results, that there are diseased actions which leave no marks in the solids, or only such as are secondary and subordinate. When every physician, at all familiar with post mortem examinations, has found many of the solidist opinions in which he was educated gradually melting away; when such men as Carswell, Andral, and Cruveilhier,* take the lead in investigations which show the blood to be the seat of the gravest changes, and so far as we can see primary changes, there is little ground for suspecting pathological anatomy of exclusive solidism.

But these are, after all, little more than side issues. The statement of gravest significance, and if it be supported, one which closes the argument on the real question at issue, is that the "lesions are often not sufficient to influence the progress of the disease, or to explain the cause of death." This statement, unsupported as it is by facts, is nothing more nor less than begging the question. The opinion which follows in support of this assertion, that "the most malignant form of this disease, that which proves fatal in a few hours, offers *the fewest and least striking* structural lesions," may be true enough; for intense pyæmia requires little aid to destroy life, and certainly it is not the most striking among the manifestations of morbid anatomy. Two questions are suggested by those statements:—1st. What is really the shortest time in which the most malignant form of puerperal fever destroys life; and, 2d. Whether this shortest time is not long enough for endometritis to produce fatal contamination of the blood? or, in other words, in what time purulent infection can overwhelm the vital forces?

Dr. Clark had not, as he said, made any extended researches to ascertain the shortest duration of puerperal fever. He had only looked over his own cases, and those reported by the late Dr. Vache. These latter are cases which occurred in Bellevue Hospital in 1840, when the form of of the disease was the most malignant, and the fatality among those attacked greater, than in any other visitation of the fever, since the lying-in-wards were opened. The shortest case of which he had any notes was fatal in 30 hours. The six shortest of Dr. Vache's cases lived 33, 36, 42, 44, and 48 hours respectively, and the lesions noted in these several cases were as follows:

*Case* 5.—Duration, 33 hours. All the peritoneum injected, that of the small intestines highly so; mucous lining of the small intestines much softened and inflamed; a portion of that of the stomach inflamed; a pint of straw-colored serum in peritoneal cavity; interior of uterus appeared natural.

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* Cruveilhier, (*Anat. Path.*, Liv. xi., p. 3,) discussing this very point, viz., how purulent contamination affects the system, says: "The solidism of the school of Pinel was mute before such facts;" and adds, that the "*sympathy*" of Bichat was "a metaphor, a felicitous word, which took the place of a fact."

*Case* 8.—Duration, 36 hours. Peritoneum decidedly injected, containing a pint of dirty, cream-colored, puriform fluid, with shreds of lymph; mucous membrane of stomach and intestines considerably inflamed; *the inner surface of uterus covered with a shreddy secretion of the color of gangrenous tissue, and apparently saturated with pus.*

*Case* 19.—Duration, 42 hours. Peritoneum somewhat injected, containing a quantity of reddish-brown fluid, but no lymph; half an ounce of pus between the uterus and bladder; uterus lined with a *dark chocolate-colored stringy secretion*, which being scraped off, left *the inner surface somewhat injected.*

*Case* 12.—Duration, 44 hours. Some lymph on the peritoneum, half a pint of brown serum containing lymph flocculi, in its cavity; inner surface of uterus covered by *a fœtid stringy matter*, *intermingled here and there with a grey, ash-colored deposit.*

*Case* 1.—Duration, 44 hours. Peritoneum injected, a pint of sero-purulent fluid in its cavity, considerable lymph on its surface; inner surface of uterus covered by *a light red secretion, with an occasional black patch.*

*Case* 13.—Duration, 48 hours. Lymph on several portions of the peritoneum; a little pure serum in its cavity; right ovary large, and contained some small abscesses; inner surface of uterus lined with *a pink-colored matter,* of the appearance of healthy lochial discharge; broad ligaments of right side thickened and puffed out by deposition of lymph.

It is proper to state here that Dr. Clark saw all the cases reported by Dr. Vache, as they occurred after the 23d of February, up to the time the lying-in-women were sent to the island; and at Dr. Vache's request he took charge of such patients as were left in the infected wards, when new wards were opened. He also witnessed and recorded all the post-mortem examinations which were made at Bellevue after the above date. Case 4, and all from 6 to 18 he saw, and it was from his notes of the lesions that Dr. Vache's notes were partly made up. When case 5 in the above list was examined, particular attention had not been paid to the inner surface of the uterus, and the report that this surface "appeared natural," cannot be taken as conclusive, especially since Dr. Vache himself, as a rule, did not witness the dissection, for prudential reasons. It was case 8, in which the uterus presented an appearance altogether like that figured by Cruveilhier, Liv. iv., pl. vi., fig. 2, that drew attention strongly to this surface, and it was carefully studied in all the cases which occurred afterwards.

Dr. Clark holds that "the light red secretion" of case 1, the green, shreddy, gangrenous-looking effusion of case 8, the "fœtid stringy matter" of case 12, the "chocolate-colored stringy secretion" of case 19, and the "pink-colored matter" of case 13, all indicate a morbid state of the inner surface of the uterus, and that all these "matters" and "secretions" are the fibrinous or purulent products of inflammation, colored variously by the blood in the uterus. The natural appearance of this uterine surface, for some days after delivery, is in his conviction that which is given it by adherent blood, coagulated in shreds, or small masses, and by the watery secretion which is effused to wash away this blood; the prevailing color being that of dark, coagulated blood, for at least two or three days.* As to Dr. Vache's suggestion, that the "pink-colored matter," in case 13, was probably healthy lochial discharge, had he seen it himself he would hardly have entertained this idea. Dr. Clark's notes on this case are full, and, having been made at the time of the autopsy, he thinks they can be relied on. "The inner surface of the uterus was covered by a thin flocculent matter which could be easily removed. This appeared to be lymph colored by a little blood. There were a few shreds of lymph lying unattached in the neck. The odor was not very offensive." "Several vessels of the left ovary contained each, instead of blood, a drop of what appeared to be pus." Purulent contamination in this case, then, may have had a double origin. Dr. Clark adds to these, one

*Case.*—Duration, 30 hours. Peritoneum injected, most so over the uterus and intestines; about a pint of dirty orange-yellow, sero-purulent matter, containing a few flocculi of lymph in the cavity; inner surface of uterus covered by a dirty pink-colored and yellowish-white exudation which appeared to be fibrine.

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* M. Cruveilhier (*Anat. Path.*, Liv. xiii., p. 2,) expresses the opinion that purulent effusion is in general a part of the process by which the inner surface of the uterus becomes covered again with its lining membrane. He regards the lochia as a form of pus in most cases, and thinks that non-purulent lochia are the exception. He does not, however, regard the earlier lochia as having this character. It is possible that the analogy of a healing ulcer may have led him astray. With our improved means of determining this point, the lochia should be investigated anew. It has been stated in an earlier part of this discussion, that in the few cases examined of persons dying of puerperal convulsions, and other non-febrile accidents of labor, pus was not found in the uterus, and that in a portion of the cases of actual endometritis the product of the inflammatory action on the free surface is not pus, but lymph. It is possible, then, to say the least, that this distinguished observer may have erred. But if a more careful investigation should confirm his views, it would only touch one of the supposed evidences of endometritis, and not the fact of its existence or its relations to the symptoms of puerperal fever. The reparative process, though pyogenic, has no analogies in its *constitutional effects* with the inflammatory; and it appears from Sedillot's experiments that a certain moderate quantity of well-conditioned pus may really enter the circulation and yet produce no sensible effects.

In all these *short* cases there was evidence of inflammatory lesion of the peritoneum; in all but one there was a morbid exudation on the inner surface of the uterus, and in this one Dr. Clark was informed by those who made the dissection that the inner surface of the organ was not particularly inspected.* There may be cases on record of shorter duration than these. But it is of little importance whether there are, or are not; for it was claimed when these views were first presented, that this internal inflammation except in the most striking cases had been overlooked. The appeal to the past, then, cannot be admitted into the argument. Future observations, made in view of the appearances here described, must decide the question, whether there is or is not a puerperal fever without some inflammatory lesion, peritoneal, uterine, or intra-uterine.

Still it will not be a loss of time, perhaps, to inquire a little farther into the probable effects of pus, laudable and ill-conditioned, mingled with the circulating blood. Sedillot, in his valuable treatise on "Purulent Infection or Pyæmia," has fixed the period in which the contamination from ordinary causes will prove fatal, at four to eight days; admitting, at the same time, the *pyoèmiées foudroyantes*, in which a large quantity of pus penetrates the circulation rapidly, as from an abscess opening into vena cava or portal vein, in which death will be determined in a few hours (p. 482.) He recognizes, also, a grave condition, indeed incurable poisoning, when pus is mingled with the blood, though the quantity be less considerable, by continual additions (p. 483); and he expressly denies that in the rapidly fatal cases, there is any formation of metastatic abscesses. In nearly all the cases he reports of this accident in man, these abscesses were found after death; but when pus was injected into the veins of dogs, *if the quantity was large*, or if he injected the *serum of ill-conditioned* pus, death occurred without such productions. His experiments also show that in the dog, at least, moderate purulent infection may produce no disastrous effects; and that in larger quantity, pus in the circulation does not always produce fatal poisoning.

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* Cruveilhier (*Anat. Path.*, Liv. viii., pl. i. ii. iii., p. 11,) reports a case of puerperal fever (typhus puerperal) which was fatal in fifteen hours after delivery. The peritoneum contained a large quantity of white pus, such as is discharged from a phlegmonous abscess. The lymphatics of the uterus contained pus. There was dark slate-colored softening of the left lung. In this case M. Cruveilhier thinks the peritonitis preceded the delivery, as the woman had had abdominal pains and fever for five days.

On p. 10 he records a case fatal in *twenty-four hours*, the time of the attack being well marked and after delivery. The peritoneal cavity contained serum slightly bloody, and between the uterus and rectum pus. The sub-peritoneal cellular tissue was infiltrated with pus on the colon, along the right ovarian vein, in the broad ligaments, (sero-purulent matter,) on the neck of the uterus, and part of the bladder, etc. Uterine lymphatics full of pus; left ovary enlarged and softened.

In another case (p. 10) the disease was fatal in *forty-eight hours*; there was flocculent serosity in the peritoneal cavity: pus was infiltrated into the sub-peritoneal cellular tissue of the left iliac fossa; along the left ovarian vein to the kidney; around the neck of the uterus; in the walls of the vagina; and filled the lymphatics of the sides of the uterus.

In this series of cases the shortest was fatal in 24 hours. Pus was found in the uterine lymphatics in all, and in all there was peritonitis. The inner surface of the uterus does not appear to have attracted attention.

These experiments are sufficiently instructive, in their bearings on several aspects of this question, to authorize a particular reference to some of them. Thus in

*Expts.* 1 and 2, M. Sedillot injected laudable pus, about 60 grains, the dogs weighing 14 and 16 lbs. troy, and it produced no sensible effect.

*Expts.* 3 and 4.—The same quantity, the dogs of the same size—for a short time yawning; pendiculations, chills, refusal of food; and in one, (a little of the pus being from a bubo), alvine evacuations; but in both prompt recovery.

*Expts.* 5 and 6.—Dog weighing 15 lbs., 225 grains of laudable pus; dog 32 lbs., 320 grains. Hurried respiration, thirst, refusal of food, disposed to be alone, lying down and unwilling or unable to rise, after some days extreme emaciation: recovery.

*Expt.* 7.—Dog 17 lbs., 120 grains of fœtid pus. Animal gravely ill; very feeble; intense chills, panting and difficult respiration. After ten days began to recover.

*Expt.* 15.—Dog 10½ lbs., 120 grains of pus, greenish and fœtid, from a phlegmon in the foot; in ten minutes animal supported himself against the wall, then sank down upon the earth, chills, hurried respiration, cries; *death in one hour.*

*Expt.* 16.—Dog 17 lbs., 60 grains of pus, from a venereal abscess of the scrotum; feebleness, difficult respiration, chills, horripulations, alvine evacuations, semi-paralysis of the posterior extremities: *death in one hour.*

*Expt* 18.—Dog of medium size, 375 grains of well-conditioned pus; extremely feeble; stupid; when urged to walk, staggering, and falling frequently; frequent respiration; violent chills; alvine evacuations; tongue pendent; eye brilliant; later, respiration slow; then difficult, then raleuse; *death in four hours.*

*Expt.* 20.—Dog 27 lbs., 105 grains of pus from a gangrenous abscess in the muscles of the neck. Animal soon sunk to the ground; alvine evacuation; respiration accelerated, panting; attempts to vomit; neither ate nor drank; *death in five hours.*

*Expt.* 21.—An Alsacian dog, 90 grains of the same pus; anhelation; diarrhœa; refusal to eat or drink; *death in eight hours.*

*Expt.* 27.—Dog 14 lbs, 60 grains of pus from an abscess in the thigh three weeks open; violent chill; feebleness of posterior extremities; refusal of food for eight days, and of water for four; escape from the house, choosing the very cold air outside; *death in eight days.* All the internal organs healthy, but a gangrenous abscess in the right thigh.

*Expts.* 28, 29, 30, 31, 32, 33.—Successive injections of pus; all fatal.

*Expt.* 34.—Injection of 75 grains of the serum of filtered pus, repeated four times. Death on the fifth day, without metastatic abscesses; animal in good health till nineteen hours before death.

*Expt.* 37.—Dog 23 lbs., 150 grains of filtered serum from the pus of a carious bone of the leg; second and third injection; great feebleness; death on the third day, without metastatic abscess.

*Expt.* 38.—Dog 40 lbs.; injection of filtered serum of laudable pus 150 grains—no effect. The same serum on second day injected in the same quantity, no effect. Third day slightly fœtid, same quantity: animal feeble, raised himself with difficulty. Fourth day, two injections of 75 grains, now fœtid. Death eight hours after the last. No abscesses, but hard knots in the lungs.

*Expt.* 41.—Successive injections of the filtered serum of pus from empyema; suppurative phlebitis; metastatic abscesses; hæmathorax; death on the eighth day.

*Expt.* 42.—Injection of 2500 grains of serum filtered pus, the pus of a lumbar abscess—no effect.

*Expt.* 44.—Dog 10 lbs. Injection of 45 grains of the globules of pus from an abscess in the arm, drawn the same day and kept at zero. Death on the third day—refusal of food; thirst; vomitings; feebleness; prolonged chills; tremblings; inflammation of the left eyelid, and of the cornea; ecchymotic spots in the lungs, but no abscesses.

The import of these experiments, and their relation to the disease we are considering, hardly require comment, especially when it is remembered that the uterine cavity is open to the ready access of air; that when inflammation has been recognized on its inner surface, it has often been of a character most likely to furnish a septic agent; and that the veins of the uterus are, after parturition, so arranged as to receive, either directly or secondarily, such septic agent, healthy or degenerated pus, in an augmenting and consequently accumulative stream.

Farther on, Dr. Clark said he might have occasion to remark on one or two of the other positions taken by Dr. Barker. It was sufficient for the present to say that the only question of importance on which they differed was—whatever might be the poisonous influence which produces the disease; foul air of an ill-ventilated or over-crowded apartment; the contagious principle given off by the sick person; the contamination of erysipelas; or, septic poison from a dead body, operating on the peculiar susceptibilities of the puerperal state; whether puerperal fever, however produced, is really ever fatal before inflammation of some sort is developed, or without the concurrent agency of such inflammation. The argument of Dr. Barker had not convinced him that the ground he had taken at an early stage of this discussion was not defensible; and he again submitted to the Academy, to be tested by their future, not by their past, experience, whether the form of puerperal fever, heretofore regarded as fatal without demonstrable lesion, is not the fever with endometritis, and consequent pyæmia or septico-pyæmia.

In turning to the treatment of puerperal fever, Dr. Clark said he was aware that he was expected to speak, not of the treatment in general, nor of the different modes of treatment adopted by physicians, but of the effects of opium. This would be the scope of his remarks, with only such additions as his observation had enabled him to make of the effects of veratrum viride and of one or two other agents. To show how his mind was led to rely on opium as a remedy in this disease, he would ask the indulgence of the Academy, while he recited the history of the exclusive opium treatment in simple and traumatic peritonitis.

The treatment of ordinary peritonitis, for which the graduates of the College of Physicians and Surgeons, and the pupils of the New York Hospital, have the sanction of those institutions, to as late a date as 1836, and probably till several years after that time, consists in bleeding, leeching, and the use of calomel and opium; the calomel, given with the view of affecting the system as promptly as possible, and the opium to retain the calomel, being given in grain and half grain doses. Indeed, these were the means relied on by nearly the whole profession. In 1841, however, visiting Woodstock, in Vermont, Dr. Clark met there Dr. B. R. Palmer and Dr. H. H. Childs, and he found that these gentlemen had become attached to Armstrong's method, as it is commonly called. He saw, with Dr. Palmer, patients treated in that way doing much better than on the more generally adopted plan. In the spring of 1841–'2 or '3, probably in one of the earlier years, talking of these cases, Dr. Clark suggested to Dr. Palmer that probably opium was the curative agent in peritonitis, and that the bleeding might be safely omitted, if the effects of the drug were steadily kept up. The next season, when they met, Dr. Clark was able to report an increased confidence in his suggestion, for he had tried opium alone, and had been successful. This statement he makes on the authority of Dr. Palmer, for in the lapse of years he had himself quite forgotten how the thought originated. From that time, neither he nor Dr. Palmer had bled a patient with this disease, and he remembers but one instance in his own practice in which leeches have been used; and Dr. Palmer is now in the habit of saying, that with this treatment, peritonitis is no more formidable than a pneumonia. Up to 1850, Dr. Clark had treated eight cases successfully. In that year he saw his first unsuccessful case. The subject of the disease was a gentleman of some distinction, seen with Drs. Bulkley and J. M. Smith. In that case, however, it is proper to add, the disease probably gained much force, under the mask of diarrhœa, before its true nature was recognized. Since that time he has lost but two in private practice, one in the practice of Doctor Gilman, and one in that of Dr. McNulty. In the first of these, there were some grounds for suspecting perforation, and in the second that accident was demonstrated after death. In the hospital there has, perhaps, been one death from the same cause in that period.

It was not till he had tried the opium in puerperal peritonitis that he became aware that his experience was but a confirmation of earlier observations; but it soothes his vanity somewhat, that among the many physicians here and elsewhere who talked about and adopted the treatment, there were none who, at that time, could enlighten his ignorance. The report of what Drs. Graves and Stokes had done, in the fifth volume of the Dublin Hospital Reports, had either not been seen by New York physicians, or had attracted but little attention, and had been forgotten. It is certain that the suggestions of Drs. Graves and Stokes were not adopted by the profession here, and, so far as is known, had not influenced the opinions of any practitioner in the city. In Dr. Grave's "Clinical Lectures," by Neligan (p. 244, vol. ii.) the following passage occurs: "The first case in which I used opium in peritonitis occurred in 1822, in the old Meath Hospital. It was that of a woman in whom the inflammation set in after the operation of tapping for dropsy. The case seemed so hopeless, and the suffering of the patient so intense that I was induced to order opium for her in large doses. She also got wine. To my astonishment, she recovered. I afterwards published with Dr. Stokes our conjoined experience of the efficacy of this plan of treatment, in the fifth volume of the Dublin Hospital Reports." "The use of opium in the form of peritonitis then described, is almost universally adopted," (that is, almost universally in Ireland.) Dr. Graves, then, did not propose opium as a remedy for *peritonitis*, but for peritonitis *of a particular form.*

The following extracts from Armstrong's Lectures will explain his plan of using opium: 1. "The first and main remedy is blood-letting, carried to approaching syncope." 2. "As long as the tongue continues moist, opium with blood-letting may be considered a sovereign remedy." "As soon as the patient recovers srom the syncope, give him, if an adult, three to five grains of opium." He goes on to say that if in four hours the pain returns, the bleeding should be repeated, and the patient should take two grains of opium, with calomel; and if two hours later there is still pain, he directs still another bleeding, and one and a half or two grains of opium, with calomel. "The opium," he says, "tends to arrest the secretions of the liver, but when combined with calomel, it has not that effect. Whenever, therefore, you repeat the opium, give calomel with it." The estimation in which Dr. Armstrong holds opium is emphatically announced in the following citation: "If I were subject, etc., and were only allowed to have opium or blood-letting, I would choose opium, though I would prefer both together."

Thus it appears that Graves proposed the use of opium for a particular form of peritonitis only, and Armstrong used it only as an auxiliary, though regarding it as rather the more benevolent agent among those he had chosen. It is not improper to add that the latter author startles our confidence a little, by a somewhat braggart air, and by figures that appear to us very large. He says: "I have treated nearly three hundred cases, with a success far greater than I have had from any other plan; and I could defy all the physicians of this country to show any more successful practice." Dr. Watson, in his Lectures (Am. Ed., 1847, p. 787), referring to the use of opium in peritonitis, says that—"A pamphlet was published some years ago, by Mr. Bates, of Sudbury, recording some striking cases of recovery from severe peritonitis, under large and frequent doses of opium, and a rigid adherence to the horizontal position." It is not stated whether bleeding was resorted to in those cases or not. But Dr. Watson is not convinced of the propriety of relying on opium, either by Mr. Bates's pamphlet, or by the cases of Drs. Graves and Stokes, which he reviews; for he says: "To sum up, then, bleeding, and calomel, and opium are to be resorted to for checking the inflammation." "The opium," he says, "allays pain, and perhaps relaxes spasm; mercury tends to arrest the inflammatory action." Dr. Clark presented the facts in this form, to secure for the opium treatment all the importance to which such independent and concurring observations should fairly entitle it.

But the history is not yet concluded, for said Dr. Clark, if I may not claim for myself the priority of the discovery, by just so much as I esteem it useful, I am happy to be able still to claim it for my country. To you, sir, [addressing the president], our acknowledgments are due for having preserved on record the fact that the late Dr. Wright Post, of this city used this *magnum donum Dei*, to combat inflammations, before either of the physicians, whose authority is now so often quoted. Dr. Post, it seems, used opium in large doses "for its paralyzing influence over disease" of an inflammatory character, as early as 1804, and for enteritis in 1810, perhaps considerably earlier; for he seems to have been familiar with its use at that date. This pamphlet was published in 1829, before I was myself a student of medicine, and I became indebted to Dr. Van Buren, two or three years ago, for my first opportunity of perusing it. It is entitled a "Biographical Memoir of Wright Post, M.D., late Professor of Anatomy, etc., by Valentine Mott, M. D.," etc.; and contains a letter from Dr. F. G. King, addressed to the author, which details these facts. It is worthy of republication at this time, when the virtues of opium are undergoing renewed investigation.*

The details of this opium treatment of peritonitis are so nearly identical with those of the same treatment applied to puerperal fever, that the management of the two diseases can be most conveniently spoken of together; and the hour being far advanced, it is better that both be postponed till another occasion. It is, perhaps, proper to say in closing, and in anticipation of what is to be said hereafter, that my confidence in the opium treatment of puerperal fever, with peritoneal complication, is in no degree shaken by accumulating experience, but is rather increased; while its usefulness in that form of the disease which is attended by purulent infection, has not been demonstrated, at least, as an exclusive method.

New York, Feb. 5th, 1829.

My dear Sir:—In reply to your inquiries as to the use of anodynes and opium by the late Dr. Post, I have to remark, that in conversation with him some two years past, relative to Dr. Armstrong's practice in inflammatory diseases, he told me that the use of opium, as recommended by that gentleman, (except in *larger doses*,) was corroborated by his own experience for a long series of years, and that to him it was by no means a novelty: for that in 1804, he was called to a child about three years of age, suffering under a violent pneumonic attack, accompanied by pain, cough, and febrile excitement. That he accordingly bled, blistered and evacuated the patient, afterwards placing him under the use of antimonials, but all without benefit. Matters proceeded from bad to worse, until the child, exhausted by constant cough and excessive restlessness, seemed nearly at the point of death. Under these circumstances, he determined to quiet all these irritating symptoms by a powerful anodyne, and accordingly exhibited 60 drops of laudanum. Two hours after, he was called to the child, then supposed by its parents to be dying. He found the features sunken, the surface covered with a cold clammy sweat, and secretions of an unpleasant appearance about the eyes and nostrils, but the pulse had diminished in frequency, and was more full; the respiration was slower, and everything indicated the full and desired action of the anodyne. The parents were astonished to hear the physician say that the child would soon be better. The next morning all untoward symptoms had subsided, and the child became rapidly convalescent and recovered.

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*See Dr. King's letter to Dr. Mott.

This was his first trial of anodynes in such affections; his *experiment*, if you please; but a few months afterwards, a similar case occurring, he he immediately resorted to the anodyne; depletion and evacuants having been premised, and with similar success, since which period he has generally continued that mode of practice; latterly, however, substituting the Dover's powder in place of laudanum, in pneumonic attacks.

In 1810, he was called in consultation upon a gentleman in Jersey, suffering under enteritis. He found that he had been repeatedly bled, blistered, and evacuated, but to no advantage; the pain still continued acute; the pulse was small, frequent and corded; the skin dry and hot. Under these circumstances he suggested the propriety of exhibiting a powerful anodyne, in order to quiet all irritation, and give nature an opportunity of recovering herself. After a little hesitation on the part of the attending physician, it was finally determined to adopt the course proposed, and 100 drops of laudanum were directed; an hour elapsed,—no sensible effect having been produced, when the *dose was repeated*, and in half an hour the patient was under its full influence. He awoke the next day free from pain or tenderness, and so recovered. The same gentleman has been frequently attacked since with the same affection, and uniformly after being bled and evacuated, he has recourse to his anodyne, which rarely fails to quell the disease. But, to be efficacious, the dose must be *heroic*, at least such was the opinion of Dr. Post, who often remarked that practitioners, especially in England and France, were not aware of the value of opium in inflammatory diseases, for even when employing it in such cases, their doses were too trivial to exert any marked influence over the malady. He himself always exhibited it under the opinion, that to obtain its soothing effect upon the system, and its *para-*

*lyzing* influence over the disease, it must be given in large doses. In diarrhœa and certain conditions of dysentery, after having cleansed the passages, he employed laudanum or Dover's powder with the happiest effect; in fact, he rarely used much else than salts and Dover's powder in diarrhœa, in adults. In his own case, he was no less prodigal of anodynes than with his patients. Being, as you well know, for many years a constant prey to pleuritic affections, his treatment of himself was short and efficacious, viz., blisters and purgatives, followed by 80 or 100 drops of laudanum, which quieted his cough—allayed pain, and soon placed him in condition to resume his business.

In conclusion, permit me to state an occurrence which took place under my own eyes, two years previous to his death. He was then violently attacked with pleurisy, accompanied with much fever, for which he had been purged and blistered, and at the period in question, was under the use of antimonials. At this time he directed me to give him 70 drops of laudanum. I remonstrated, directing his attention to the dryness of his skin, its increased heat, and the frequency and hardness of his pulse. His answer was, "believe in my experience rather than in your theory; give me 70 or 80 drops of laudanum, and an hour will convince you of its propriety." It was given, and within the hour his pulse became calm, full and slow; his skin was covered with a gentle perspiration, and his condition strikingly improved. He left his bed the next day, and frequently since has said to me, "I think I have given you a clinical lecture that you will remember."

Such, my dear sir, are the facts concerning which we some time since conversed, and if they can be of any service to you, employ them as you think proper.

Yours truly,

F. G. KING.

To. V. Mott, M. D.

## *Elephantiasis Arabum of the Left Inferior Extremity treated successfully, by Ligature of the Femoral Artery.* By J. M. Carnochan, M.D., Prof. of Surgery in the New York Medical College, Surgeon-in-Chief to the State Hospital.

In September, 1852, I recorded a case of Elephantiasis Arabum successfully treated, by ligature of the femoral artery. Since then, I received a letter from Professor Erichsen, of the London University, in which he mentions a case of Elephantiasis treated, with a successful result, upon the same principle.

The portion of his letter referring to this subject runs as follows:—"I have perused the details of your case with great interest, and have been especially struck by the account of the successful ligature of the femoral artery for that otherwise intractable disease, Elephantiasis Arabum. The operation was certainly a bold step, but one that the result shows to have been the proper one to take; and it certainly does infinite credit to your judgment and skill, to have devised a successful treatment for this complaint. I have at present under my care a man with extensive Elephantiasis of the foot, in whom, about two months ago, the Assistant Surgeon, during my absence, tied the anterior tibial, in the middle third of the leg. This case has done well, and the limb is fast recovering its usual dimensions. The operation was performed on hearing of the success of your case."

The following case is another example of the beneficial results of this practice, in a disease hitherto deemed incurable by other means:

Francisco Podesta, a native of Italy, 39 years of age, peasant by occupation, was admitted into the State Emigrant's Hospital, on the 17th of April, 1857. About six years previous to his admission, after prolonged exposure to cold and dampness, he was attacked with severe pains in the left leg, extending upwards along the thigh. The pain was followed by general tumefaction of the leg from the toes upward to the knee joint. The local disease was attended by constitutional disturbance, which, however, gradually subsided, the limb remaining much disfigured and considerably larger than that of the opposite side. The foot was thickened, and appeared stunted from the increased circumference around the ankle; the calf of the leg was also considerably augmented; the skin and subcutaneous tissues were dense, hard, and hypertrophied; the surface of the limb below the knee was scaly, and, in general, presented the unseemly appearance from which the term Elephantiasis has been derived. Around the ankle the hypertrophied tissues were thrown into large and prominent folds, hanging, as it were, over the ankle joint; between two of these folds an extensive ulceration existed, as large as a dollar piece. The patient, in this condition, was unable to follow any vocation; in fact, was unable to walk, and entered the hospital more as an asylum, than with the hope of obtaining relief. His general condition was feeble, and he presented a cachectic appearance. The following were the measurements of the limb: the thighs at the middle were of equal measurement, 19 inches; around the calves on the sound side, 10 inches; on the diseased side, 13 inches; above the ankles on the sound side, 8½ inches; on the diseased side, 12 inches; around the ankles on the sound side, 9½ inches; on the opposite side, 15½ inches, while the measurement from the heel around the instep on the sound side was 19 inches, and 19 inches on the diseased side.

Deeming it unnecessary to repeat in this patient's case the numerous remedies which had been unavailingly tried, I proposed to apply a ligature upon the femoral artery, for the purpose of modifying the morbid nutrition of the limb. Allowing him some time to improve his general health, and to become accustomed to the air of the hospital, on the 23rd of May a ligature was applied on the femoral artery in Scarpa's space. The artery was found to be healthy and of normal size. May 27th: Everything had progressed favorably up to this time, and the limb was beginning to show evidence of diminution. July 1st, the ligature came away; at this time, the calf of the diseased side had diminished 1 inch above the ankle; around the ankle, 1¾ inches, and in the measurement in the heel around the instep, 3½ inches; the skin of the leg and foot was also soft. July 10th, the patient was allowed to move about, the ankle joint which previously was almost immovable, now admitted of flexion and extension. The ulceration had now healed, and from this time forward until the 24th of August, (the time of his discharge from the hospital,) the dense and hardened tissues were gradually becoming more natural and soft. He left the hospital with his limb almost of natural size, and able to walk with but slight lameness.

45 La Fayette Place, Dec. 10th, 1857.

[*American Medical Gazette.*

# EDITORIAL AND MISCELLANEOUS.

## Our Journal.

We are making arrangements which we hope will result in a decided improvement to this Journal, and desire to express the determination to add to its interest continually, as our friends may enable us so to do; and to this end we would urge those who are now subscribers and contributors to exert themselves to extend its circulation, and increase the number and ability of its collaborators. It is true that we have now quite a large subscription list, but not half what we propose, or that would be necessary to justify us in furnishing the Journal of which we would desire to be the Editors.

## A Merited Compliment.

We take the liberty (without the knowledge of the gentleman concerned,) of announcing the fact that the Faculty of the Atlanta Medical College, as some slight evidence of their appreciation of the extraordinary energy and ability which has been manifested by Prof. JOHN G. WESTMORELAND, in behalf of the Institution, have determined to place his portrait in the College edifice, to the erection of which his exertions have so largely contributed. [SEN. ED.]

## Chair of Chemistry and Pharmacy in the Atlanta Medical College.

We are enabled to state that the chair of Chemistry and Pharmacy in the Atlanta Medical College will continue to be occupied by Prof. ALEXANDER MEANS, M. D., the distinguished gentleman who has heretofore held the position.

In this connection, it is perhaps proper to state that for a time it seemed probable his services would be lost to the Institution, his resignation having been placed before the Faculty, though not acted upon by the Trustees. Previous to the selection of an individual to fill the expected vacancy, it being understood that he desired to resume his connection with the College, he was allowed to withdraw his resignation by the unanimous consent of the Faculty, and will, we are assured, bring renewed energy to the discharge of the duties of his Chair. Those who have announced the resignation, will of course make the correction.

## The Cincinnati Lancet and Observer.

We have received the first number of the above journal, being a combination of the *Western Lancet* and *Cincinnati Medical Observer*, to be edited by Drs. Mendenhall, Murphy, and Stevens. These journals have been among our most valued exchanges, and, with a consolidation of the *merits* of each, there will probably be no better journal in the country. We can confidently recommend it to those who would desire to have upon their tables one of the best representatives of Western Medicine.

The journal contains, monthly, sixty-four pages of reading matter, making a handsome volume of seven hundred and sixty-eight pages in the year, and furnished to subscribers at $3 per annum, with postage pre-paid to advance-paying subscribers; and is offered to Clubs of two or more, remitting at the same time, until the 1st of April, at $2.

## Prof. A. H. Buchanan's Introductory Address.

We have received and read with pleasure the Introductory Address to the Medical Class of the Medical Department of the University of Nashville, for the present Session. It is an interesting and instructive address, and eminently characteristic of the man—scientific and practical—doing credit even to its learned and able author.

## Immoral Advertisements.

We have for a length of time thought of directing attention to a species of advertising, to be found in many of the newspapers of the day, which we can not regard in any other light than as grossly *criminal* upon the part of the authors, and in the highest degree censurable upon the part of those who control the press, which should be a vehicle for the lessons of morality and virtue, rather than those of vice and infamy. We have no idea that we shall accomplish much by what we say upon this subject; but we are determined to raise our feeble voice against what we can not possibly regard in any other light than as the gravest offence against the well-being of Society.

In this connection, we take pleasure in referring to and quoting an editorial article from the "Cincinnati Lancet and Observer," which expresses in a most forcible manner our views upon this subject. The Editors remark, under the head of "Abortion Pills:"—

"We have for some time felt a disposition to enter our protest against a villanous form of advertising, which defiles the columns of a very large portion of our secular newspapers: we allude of course to "Female Pills," which are freely advertised under a variety of names, as 'Sir James Clark's celebrated Female Pills,' and with other titles—all, however, with this saving clause, by way of caution! that these pills are not to be taken by females while in a pregnant condition, as they are sure to bring on miscarriage; of course nobody is mistaken in the design of these cautions or the purpose for which those remedies are thus paraded in all our family newspapers throughout the land. They are a grand rascality, and the author of these remedies and advertisements are worthy of a high place in our State Prisons—public opinion and public contempt will not reach such knaves. We are sorry also to see that the publishers of our most respectable newspapers so readily make themselves *particeps criminis* in this matter; we certainly think they have not reflected upon the *nature* and *tendency* of these advertisements, which thus thrust into the hands of our sisters and daughters all over the country—in almost so many words, whisper the insidious language of the tempter in their ears—'thou shalt not surely die.'

"Several of our cotemporaries have already justly censured these publications. Our friend of the Ohio Medical and Surgical Journal has recently shown this thing up in its true deformity, and as he very truly says, 'the most stupid female in the land who meditates wrong conduct, will recognize at once in looking over such statements, that there is a medicine that will produce *abortion.*' We have good reason to suppose that, in several instances, death has been produced through the use of these Pills, and we doubt their efficacy in any case; nevertheless, their moral character is the same, and the same in their temptation—they are essentially advertisements of *abortion medicine.* The truth is, a large portion of the community is becoming fearfully indifferent, and loose in their views of this subject, and it is high time wiser counsels were presented. *Physicians* may do good by presenting this matter in its true light to editors and publishers of newspapers. For years the venerable Mussey has refused to patronize any religious paper which advertised nostrums or Quack Medicines. Let us put a like rule in practice with the secular newspapers which are admitted to our firesides—let us politely *discontinue* such as cater to this immorality."

And, in conclusion, we take special pleasure in referring to the announcement of a secular paper in our own city, being, so far as we know, the only newspaper in the State that has eschewed this profitable, (in a pecuniary point of view,) but iniquitous patronage.

In the *Atlanta National American*, of October 14th, will be found the following editorial, under the head of "Objectionable Advertisements:"

"OBJECTIONABLE ADVERTISEMENTS.—We frequently receive orders from philanthropic persons at the North to advertise books said to be written and published expressly "with a view to ameliorate the many hardships females are compelled to suffer in the capacity of mothers," and pills and other nostrums, which "never fail to effect a speedy and certain cure, when the instructions around the box are strictly followed."

"We believe *money-making* to be the chief object of the persons engaged in the manufacture and sale of such articles; that the articles themselves have a most pernicious tendency on society, and that benefitting the sex by them is a very remote contingency. For these reasons, we have always declined the publication of their advertisements, and we take this occasion to say to all persons engaged in the manufacture and sale of them that we will not publish such advertisements at *any price.*

"We confess ourselves to be anxious for advertising patronage, and we are well aware that this is of a class which can afford to and does pay well, but we will not consent to make our paper the vehicle for conveying into our own families, or the families of our neighbors, such information as these advertisements contain. If we cannot sustain our paper without admitting them, we prefer that it should die. It is our ardent desire to make the *National American* a paper which no head of a family shall hesitate to introduce into the family circle for fear of the demoralizing influence of even an advertisement. Our readers, we hope, have observed, also, that all tales and incidents of an offensive or even doubtful tendency, which have their origin in large towns and cities, and other populous localities, are scrupulously excluded from our columns.

"We have an abiding confidence in the correctness of our views. We shall stand or fall by them. If we lose temporarily, we feel sure of an ultimate and permanent success—as we are assured the public will sooner or later appreciate our course.

"In conclusion, we would say to *subscribers* and *readers* that you thus have a guarantee of *properly selected reading matter*, and that our advertisements will be such as you will do well to read instead of passing them over—as you are sure to be gainers instead of losers; and to *Merchants* and *others* who desire a good, reliable and substantial class of customers, we would remark, that the plan we propose to ourselves in respect to Advertisements, will secure to all who read our journal as a medium for advertising, just that class of customers."

For which we return the Editor our thanks, not only as a medical man, but as a deeply interested observer and advocate of all the means calculated to purify and elevate Society, and an opponent of all the instrumentalities for the propagation of vice and impurity; and, at the same time, would desire to commend it to the consideration of his brethren of the press throughout the country.

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## American Medical Association.

The eleventh annual meeting of the American Medical Association will be held in the City of Washington, on Tuesday, May 4, 1858.

The Secretaries of all Societies, and other bodies entitled to representation in the Association, are requested to forward to the undersigned correct lists of their respective delegations *as soon as they may be appointed; and it is earnestly desired* by the Committee of Arrangements that the appointments be made at as early a period as possible.

The following are extracts from Art. II of the Constitution:

"Each local Society shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half this number. The faculty of every regularly constituted Medical College or chartered School of Medicine, shall have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital containing a hundred patients or more, shall have the privilege of sending two delegates, and every other permanently organized medical institution of good standing shall have the privilege of sending one delegate.

"Delegates representing the medical staffs of the U. S. Army and Navy shall be appointed by the Chiefs of the Army and Navy medical bureaux. The number of delegates so appointed shall be four from the Army medical officers, and an equal number from the Navy medical officers."

ALEX. J. SEMMES, M. D.,
(One of the Secretaries.)
Washington, D. C.

☞ The Medical press of the United States is respectfully requested to copy the foregoing.

## Remarks on Syphilization.

We find in the *Gazette Hebdomidoire* the following extract of a letter from M. Guepin, of Nantes, to the *Jour. des Conu. Med.*, 2d Oct., 1857:

"Syphilization is practiced in some parts of India upon a grand scale, as a cause as well as a means of preventing Syphilis. Often the prostitutes of India proposed to practice syphilization upon our sailors, which they invariably refused, objecting to any method that was not adopted in Europe. The officer who gave this statement was excited by curiosity to see some of the women who made this proposition to the sailors; he discovered no disease of the skin upon any one of them, nor was he able to detect any cicatrix that could have resulted from a bubo. This fact, he adds, is of more importance as they were not apprised that syphilization had been practiced with success in France, at Turin, and at Christiana. Again, he remarks that syphilis contracted in India is of the very worst form. The French who contract the disease there frequently fall victims to its ravages, or if they are cured requiring the most energetic and methodic treatment for a length of time.

## Intestinal Animalcules.

In the Bulletin of the *Academie des Sciences*, (Paris,) of the 30th Nov., 1857, we find the following extract from a brochure by P. H. Halmstein, of Stockholm, (extract presented by M. Rayer,)—"A sailor in consequence of an attack of cholera, had suffered for some time with a derangement of the digestive organs, the more prominent symptoms being those common to an intestinal inflammation. In examining under the microscope the puss from a small ulcer of the rectum mixed with the secretions of this portion of the intestine, the author was able to detect between the globules of puss and of blood quite a number animalcules, which he described under the name of *paramecium coli.* He has since seen the same animalcules in a woman attacked with a chronic inflammation of the large intestine. The patient died, and by examination the author found that the animalcules were much more numerous upon portions of the mucous membrane little altered than upon the portion ulcerated, or with the pus from the ulcers. These animalcules live but a short time after they are removed from the intestine. The secretions in which they are contained should be examined, if we hope to detect them, soon after its removal from the bowels.

☞ N. F. Powers, M.D., of Thompson, Ga., an alumnus of the Atlanta Medical College—an occasional contributor to our Journal, and a gentleman of considerable attainments in the profession—has been appointed Professor of Physiology, &c., in the Oglethorpe Medical College, Savannah, Ga.

☞ Marshall Hall, Esq., a son of the late Dr. Marshall Hall, is the editor of a work by his father and just published in London, entitled "Prone and Postural Respiration in Drowning and other Forms of Apnœa or Suspended Respiration." The volume contains 216 pages.—*Western Lancet.*

☞ The Messrs. Lippincott & Co., of Philadelphia, are about to publish a translation of Malgaigne's great work on Fractures and Dislocations. The translator is Dr. John H. Packard, of that city.—*Ibid.*

*The Sputa in Phthisis.*—Dr. J. L. C. Schrœder Van der Kolk, Professor in the University of Utrecht, claims to have discovered a certain sign by which the sputa of a phthisical patient may be distinguished from those of chronic catarrhal affections of the lungs. He regards the presence of *elastic pulmonary fibres* in the sputa as a certain sign of the existence of a vomica. -*Ibid.*

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# ORIGINAL COMMUNICATIONS.

## ARTICLE 1.

### Note from an old Case Book.

*Adhesion of the Placenta.* By John W. Jones, M. D., Prof. of Principles and Practice of Medicine in the Atlanta Medical College, Atlanta, Ga.

Finding in my old case book, the following note of the management of an obstetrical case, some of the particulars of which are of rare occurrence and may not prove uninteresting to the juvenile practitioner; I have thought fit to present it for your pages.

I am, by no means, unapprised of the fact that such or similar cases have occurred under the observation of others, nor do I assert that it is unique or "sui generiis." Nevertheless, I cannot but believe that a summary account of the one which it was my lot to attend, if communicated, through the medium of your very interesting periodical, will not prove altogether uninteresting to the philanthropic accoucheur.

At 6 o'clock, P. M., of the 19th of May, 1846, I was summoned to attend Mrs. R. in her first accouchment; aged 30 years of middle stature, constitution ordinary—previous health moderately good. Nothing special transpired during the night, except the usual developments of incipient parturition. Early on the morning of the 20th, during each contractile effort of the uterus, (the os tincæ being considerably dilated and moderately dilatable,) I perceived a gradual advancement of the fœtal head, it being the first vertex presentation of Dewees. The bladder and intestines having been previously well evacuated, I left her to the Vis conservatrix naturæ, until noon of the same day, when, upon examination, I found the vertex at the inferior strait, and rather stationary, even under the influence of strong uterine contractions, and the parts but sparingly lubricated. I now endeavored to ascertain the state of the circulation, and found it too languid to justify venesection. The pains having continued forcible and frequent, for some two hours longer, the head was slowly protruded through the labiæ and in a few minutes thereafter, my patient was delivered of a common sized male infant, not, however, until I had removed from around its neck three coils of the umbilical cord.

The last mentioned circumstance I very naturally anticipated prior to its actual discovery, in consequence of the head having receded partially, immediately subsequent to several preceding pains. After having waited in vain for the space of twenty or thirty minutes for the expulsive efforts of the uterus to deliver the placenta, I directed frictions with the hand, over the abdomen, and simultaneously used gentle traction, by means of the cord, all of which seemed to accomplish nothing salutary.

My patient was now growing restless and rapidly becoming pale, and, also, complained of an entire loss of vision; and in a short time vomited freely and then was calm, her extremities cool and fast growing cold, pulse feeble and the entire body covered with profuse perspiration. I immediately commenced the liberal use of a decoction of capsicum, and wrapped the extremities well with sanapisms. No pain, and but little hemorrhage; alternated Cognac Brandy with the Capsicum; gave 20 grains of the Secale Cornutum, in four portions, every 15 minutes, in the form of decoction.

Sickness and emesis recurred; arterial action imperceptible at the wrist; extremities cold and clammy—face blanched, no pain; continued the stimulants, and added ten drops of the tinct Opii every 15 minutes, until 100 drops had been administered, by which time the radial artery began feebly to pulsate. She soon fell into a profound sleep and in a few hours the pulse seemed permanently strong and full.

I now had her aroused, and proceeded to manipulate so as to command the entire placenta, and endeavored, by every gentle means in my power, to extract it, which I soon found would be difficult, if not impossible, in consequence of its firm adherence to the anterior wall of the uterus. I continued my efforts faithfully for twenty or thirty minutes, and only succeeded in detaching, probably one-third of the placental mass; the remaining portion I could not separate by any effort which I conceived justifiable. I now discontinued all further interference, as my patient was again pale, pulseless and vomiting and appeared to be rapidly approximating dissolution. Nor did I do anything in the way of treatment for sometime thereafter, except endeavoruing to support the almost extinguished flame of life, which but feebly flickered in some of the more vital organs. At the same time resolving to leave the placenta to be expelled by uterine contractions or decomposition, &c., recollecting that "Ut quimus quando ut volumus non licet," and believing the "Vis medicatrix naturæ" to be "Ultimum Unicum Remedium." I therefore determined to rely upon the "Vis Vitæ," notwithstanding "Via trita, Via tuta," I resolved to depart from a practice too much followed, viz.: to remove it by manipulation.

My friend, Dr. Clark, in obedience to my request, had been sent for, and arrived about 9 o'clock, P. M., and after possessing himself of all the facts of the case, without hesitation confirmed my decision and determination, though, not until he had fully satisfied himself that the remaining portion of the placenta could not, with impunity, be detached. Dr. Clark advised the employment of stimulating enemas, within the rectum, which was accordingly attended to.

On the morning of the 21st I saw my patient and found her doing well; on the 22d all the symptoms were favorable; at 1 o'clock, P. M., of the 23d, the remainder of the placenta was discharged by the moderate and spontaneous contractions of the uterus. The nurse was directed to use injections, per vaginum, three times daily, composed of diluted Pyroligneous acid. At noon of the 28th my patient was laboring under severe headache and high arterial action, hot skin, &c. Ordered 20 grains Sub. Mur. Hyd. to be followed in 6 hours by Oleum Ricini. On the morning of the 29th I called, and learned that she had had several copious bilious evacuations, and expressed herself much relieved, continued convalescing up to this time, July 6th, and is now in the enjoyment of good health.

*Remarks.*—My object in thus submitting the outlines of this case to the medical public has been already announced. Past, and very painful experience has long since taught me the deleterious consequences of rashly separating the placenta under similar circumstances; and I am much gratified in the recollection that such a measure has never been proposed or sanctioned by me. Often, very often, have I been compelled to use manual assistance in affecting the delivery of the placenta. But sixteen years obstetrical experience has not furnished me a single example in which the placenta was so firmly adherent, or one which did not yield to persevering manipulations, except the one which constitutes the basis of this brief and very incomplete report.

When it is recollected that two-thirds of the placenta remained undetached for three days after delivery, and that there must have been great inertia of the uterus, evidenced by the absence of uterine contractions, (with the exception of tonic contraction) and pain, is it not remarkable, that the hemorrhage was so very limited!

There is another important feature of the case which merits profound attention, viz.: No perceptible excitement was produced by the use of the stimulants, (and they were active and powerful excitants,) although liberally administered for several hours, until their action was accompanied by the anodyne qualities of the opium. So soon, however, as the patient slept, the invigorating and life-sustaining qualities of the pepper and brandy, were most happily manifested, from all of which, what do we reasonably infer?

1st. That a protracted and painful labor having terminated, all the excitement that arose from the presence of the fœtus, and the pains it excited, also, having ceased, two reasons may be assigned for the diminution of excitement: the abstraction of stimuli, and exhaustion of excitability from over action, &c. Hence, the depression, exhaustion, and collapse.

2d. That, as sleep or rest is an indispensable prerequisite to restore excitability—and as the administration of opium (as a matter of course,) was followed by sleep; and, as the excitants did not produce the desired effect, until the patient slept, we infer that Anodyne and Sedatives favor the accumulation of excitability, and that a certain degree of excitability is, also, indispensable to the action of excitants.

Hence, we discover, in certain cases, the vast importance of combining sedatives and anodynes with stimulants or excitants. With this very succinct detail of a case, (to me exceedingly interesting,) I will conclude lest I be suspected of laboring under a malady too prevalent in this, our day, viz.: *Cacœthes Scribendi.*

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## ARTICLE II.

### *Potassæ Chloras in Typhoid Fever.* By V. H. TALIAFERRO, M. D., Atlanta, Georgia.

The views which we have been led to entertain in relation to Typhoid Fever, its etiology, pathology, &c., is inconsistent with the plan of treatment as usually applied. Upon many pathological points of the disease, great discrepancy of opinion exists; yet upon its more important features, there seems to be more unanimity of opinion; for instance, that the disease is asthenic in its character; that there exists a disposition to rapid disintegration and disorganization of the vital tissues, as evidenced by fœtor of the breath, sordes, intestinal ulceration, &c., is not denied. Many of the more unfavorable symptoms presented in Typhoid Fever, occur as an effect of the disposition to intestinal ulceration.

With these considerations, and the applicability of Chlorate of Potassa in mucus ulcerations, we have been led to its use in this much dreaded disease; and we are able safely to accord to it a prominence in its treatment, not as yet obtained by us with other remedies; and from our opportunity for the investigation of the disease, having lived for several years in a locality in which it prevailed as an epidemic, we have been enabled to test the efficacy of the more popular plans of treatment as yet recommended.

With the use of Chlorate of Potassa, from the commencement of Typhoid fever, it becomes, by far, more manageable, losing to no inconsiderable degree that uncontrolable disposition to diarrhœa usually attendant upon the disease; to collection of sordes upon the teeth, and fœtor of the breath; and also, to the formation of the dark, heavy, dry incrustations upon the tongue, so indicative of a low asthenic stage of inflammatory or ulcerative action. Its precise therapeutic action we do not pretend to explain, but are satisfied that its beneficial effects are mainly through its alterative action upon the blood. It is far from our intention in the present communication, to enter fully upon the pathological indications of Typhoid Fever, or the therapeutic action of Chlorate of Potassa, but merely to bring to the notice of the profession a remedy which in our hands has been attended with results exceeding by far our expectations. We find our patients treated with the Potassa less subject to diarrhœa, to tympanitis and tenderness of the abdomen, to less nervous derangement, and rarely delirum.

In stomatits it is an admitted remedy of great efficiency, and in pseudo membranous croup recently recommended by Weatherly of Montgomery as a remedy of very decided power, and also by Brown, of N. C., as a cure for ulceration of the cervix uteri. Thus we see, that in diseases of mucus membranes—whether of the stomach, intestinal canal, the larynx or the uterus, it is a remedy of decided and powerful efficacy. We do not pretend to say that the primary lesion in

Typhoid fever is in the mucus membrane of the intestinal canal, but do say that probably the most troublesome symptoms which occur in the progress of the disease are those resulting from inflammation and ulceration of the intestinal glands. The diarrhœa which results from this glandular ulceration is not unfrequently troublesome in the extreme and if not duly arrested, hurries on the patient to an alarming state of prostration, from which he may not rally, but pass from delirium and collapse, to death. For this diarrhœa Chlorate of Potassa is an appropriate remedy, and relieves it upon the same principle, upon which it relieves, ulceration of the stomach, larynx and uterus.

We usually combine with the Chlorate, Veratrum Viride, which while it does not deteriorate from its alterative properties, adds to it a sedative action upon the circulation, so desirable in Typhoid fever. The two following cases are illustrative of our plan of treatment with the Chlorate of Potassa:

*Case 1st.*—Mr. P——, some 22 years of age, was taken on the 20th of January with pain in the head, back and extremities, attended with high febrile excitement; tongue dry, red upon the tips and edges, and but slightly coated, thirst and dryness of the mouth, with some little cough and soreness of the throat. A mild laxative was administered, which operated freely, so much so that it became necessary to check its action with an opiate, after which he was put upon the following

℞—Chloras Potassæ, Sat. Sol., ℥iv.
Tinct. Veratrum Viride, ʒ½
Mix.

Sig.—One tablespoonful every three hours through the day, with an opiate at night.

This constituted the amount of medical treatment through a regular attack of Typhoid Fever. His pulse after the first few days continued from about 90 to 105; his tongue never assumed the dark crusty appearance, usual in typhoid fever. There was no delirium, no subsultus tendinum, no tympanitis, no disposition to diarrhœa. He is now, (Feb. 6,) free of fever and convalescing beautifully, with return of appetite, strength,

&c. Besides the medical treatment, sponging, quantity and quality of diet was strictly enjoined. And in this connection we would remark, that in our humble opinion the treatment of typhoid fever is frequently unsuccessful in consequence of a sufficient amount of nourishment being withheld. While rapid disintegration of vital tissues are going on for three, four or six weeks, unless the wasting system be freely nourished, it must soon be consumed by the combustion resulting from the greatly excited circulation, which with double rapidity is coursing every tissue and calling for renewal of its component elements. We have reason to believe that not unfrequently typhoid patients have perished in consequence of an insufficient amount of nutriment. Wine was also in this case administered from three to four times a day after the first week of his sickness.

*Case 2d.*—Son of Mr. ——, some 12 years of age, was taken to his bed on the 23d of January, after complaining several days of having felt unwell. When called, we found him with febrile excitement very high, pulse beating about 130, with pain in the head, abdomen and extremities. His mind was considerably excited, as was also the nervous system. He complained of severe pains and tenderness of the abdomen, which presented some unusual tightness upon pressure. The tongue presented a heavy yellow coat, with red and dry edges. The symptoms altogether in this case we considered of unusual severity and were apprehensive as to the final issue. Previous to our call a purgative had been administered, which had operated excessively, and very much exhausted the patient. From the commencement of the attack this case presented unmistakable evidences of the nature of the disease. After the administration of an opiate for quieting nervous excitement and allaying irritability of the intestinal canal, he was put upon the following

℞—Chloras Potassæ, Sat. Sol., ℥iv.
Tinct. Veratrum Viride, ʒ½.
Mix.

Sig.—Two teaspoonsful every three hours through the day and night, with an opiate at bed time, to be discontinued if nausea of the stomach should occur, which we never designedly produce in typhoid fever.

In six or seven days from the commencement of treatment his tongue had moistened, and the tips and edges lost its fiery red; nervous excitement had in a great degree subsided; the bowels had lost their tightness and tenderness, with less disposition to diarrhœa; the pulse had reduced to 110. With the continuance of this treatment, with wine, nourishment, sponging, &c., this case went safely and smoothly through his attack, without aggravation of his symptoms to any degree of severity. He is now (Feb. 8) convalescent and discharged.

## ARTICLE. III.

*Resection of the Superior Maxillary.* By W. F. WESTMORELAND, M. D., Prof. of Surgery in the Atlanta Medical College, Atlanta, Georgia.

Betsey, aged 17 years, good constitution, the property of Mr. M——, of Fairburn, Ga., entered my Infirmary the first of October, 1857. In February preceding her entry, she was attacked with pain in the superior maxillary, which was regarded, at the time, as toothache, and one or two molars extracted; the pain, however, continued to increase, and with it the jaw increased in size, particularly in the region of the alveolar processes. This state continued for several months without any great change in the size of the tumor—the pain being paroxysmal. A few weeks, however, before she was placed under my care, the disease made rapid progress—the alveolar process at one point becoming exposed, presenting the appearance of caries of the bone.

Upon her arrival at the Infirmary, I found a considerable enlargement over the region of the left superior maxillary. The gums were greatly thickened, lobulated, hard and elastic, at some points projecting half an inch or more over the remaining teeth—completely enveloping them. They were, to some extent, vascular, but did not present the appearance usually observed in encephaloid disease.

The disease extended from the second incisor to the last molar. The denuded point of the alveolar process before alluded to, corresponded with the second molar, which had been extracted, this being the only point that presented any of the characteristics of malignant disease, and this, as above suggested, presenting more the appearance of simple caries than encephaloid degeneration.

Regarding the disease as Epulis, which had, or was likely to assume the malignant form of this disease, I decided to operate at once—proposing to remove only the diseased gum and alveolar processes.

From circumstances unavoidable, the operation was deferred for eight or ten days, in which time there was a marked increase in the size of the tumor, with an aggravation of all the symptoms.

On the 20th Oct., the operation was performed as follows:

With the patient half reclining, and the head well supported, an incision was made through the thickness of the cheek, from the left angle of the mouth to near the temporal fossa, and so directed as to leave the duct of the parotid gland with the external or inferior flap, uninjured. The nasal flap was now dissected up, leaving the diseased mass fully exposed. After the excision of the thickened and nodulated gum, and the extraction of all the teeth upon that side except the two incisors, I found the remaining tumor hard and non-elastic—presenting the appearance, in a striking manner, of an enlargement of the superior maxillary itself. By means of a strong pair of bone forceps, it was at once made evident that the upper jaw was not involved in the tumor — that the enlargement was entirely a new formation. With the chisel and mallet the tumor was removed without the least difficulty, it peeling off from the superior maxillary as readily as the bark from the oak—leaving this bone, if we except a slight caries before alluded to, to all appearance, perfectly sound; the only change being the absorption, to a considerable extent, of the alveolar processes. The mass thus removed was from half an inch to an inch and a half thick, and extended over a considerable portion of the superior maxillary. It consisted of a fibro-cartilaginous substance with an osseous deposit—the deposit being greatest at its base, or the portion in contact with the bone. Under the microscope it presented very much the appearance of a cartilage undergoing the process of ossification.

The operation was now completed by removing, with a strong pair of bone nippers, the entire alveolar processes.

The edges of the incision were brought together by means of a number of small silver pins and figure of 8 suture; and supported by means of two or three strips of adhesive plaster. The cold water dressing was kept constantly applied. The greater portion of the wound healed by the first intention. No unpleasant symptoms. The patient was up in ten or twelve days, and in three weeks was, to all appearances, well.

About five weeks after the operation, the pain in the jaw returned, and in a very few days there appeared at the point occupied by the second molar, or near that point, a fungus looking mass which rapidly increased in size. At the same time, there appeared in the roof of the mouth a slight tumor or projection, evidently the result of an extension of the disease to the antrum highmorianum. The disease made rapid progress, and at the expiration of eight or ten days there was a very great enlargement over the region of this bone. The patient for some time was not disposed to submit to a second operation, but after several day's intense suffering, gave her consent. The operation proposed, was the exsection of the entire superior maxillary with the greater portion of the malar.

On the 15th December, the second operation was performed, with the patient the greater portion of the time under the influence of chloroform. The position of the patient was the same as in the first operation—half reclining, with the head well supported, and so arranged, that its position could be changed at will. A curved incision was now made, commencing at the left commissure of the lips, and extending to a point over the temporal fossa, midway between the external angle of the eye and the external ear. In making the incision, the vessels were secured as soon as severed, and a piece of sponge kept constantly in the mouth to absorb the blood, which would have otherwise interfered with respiration—the patient at the time being under the influence of chloroform. The nasal or internal flap was now dissected up to the middle of the nose, cutting off the attachment of the cartilages of the left alœ of the nose; the dissection was also extended to the orbit, detaching the eye ball from the inferior portion of the orbit. More than once during this dissection, the blood flowed in torrents, and when possible, was arrested by ligating the vessels. It was sometimes, however, impossible to secure the vessels, the hemorrhage proceeding from numerous small arteries and veins, and was then readily arrested by the application of the perchloride of iron by means of a piece of sponge. A chain saw was next passed beneath the zygomatic process of the malar bone, detaching it without difficulty. With Hey's saw, a section of the frontal process of the malar bone was made just below the external canthus, and with a chisel and mallet the nasal process of the superior maxillary was severed from its connections with the nasal and frontal bones. With a strong scalpel the mucous membrane of the roof of the mouth was now divided over the median line, and the bone severed from its fellow of the opposite side, with Liston's bone forceps—it was afterwards further detached with the chisel and mallet.

It only remained, now, to divide the orbital plate. With the nasal flap tightly drawn back over the forehead, and the eyeball displaced upwards, the orbital surface was exposed, and severed with the chisel and mallet—dividing at the same time the infra-orbital nerve. The chisel was directed obliquely downward and backwards, and after passing through the orbital plate, was driven down between the upper jaw and the pterygoid process of the sphenoid bone, fracturing to some extent, the palate bone. After detaching all the soft parts that could be conveniently reached, the bone was started from its place, by making a lever of the chisel, and a fulcrum of the pterygoid process. The bone was now readily removed by dividing the soft parts with the bistoury and scissors. Several spiculæ of bone were removed with the forceps and bone nippers. All the arteries of any size were ligated; the hemorrhage from the smaller vessels and capillaries was arrested by the application of the perchloride of iron. After filling the space occupied by the bone with lint, the edges of the two flaps were brought together, as in the first operation, with delicate pins, and the same dressing adopted. Stimulants were administered several times during the operation, and once or twice the operation was suspended for a few minutes that the patient might have some repose, which in both instances acted happily in restoring to some extent the force of the circulation. At six o'clock, P. M., the patient was put to bed, and a half grain of the sulphate of morphine and two ounces of brandy administered. At nine o'clock, three hours afterwards, I saw the patient; no hemorrhage; pulse less frequent; more comfortable; half grain morphine was again administered, with instructions to repeat it if there was much restlessness during the night.

Dec. 16th, six o'clock, A. M.—Reaction almost perfect; no hemorrhage; slept some during the night; appears comfortable.

One o'clock, P. M.—Reaction perfect; pulse 100, and sufficiently full; considerable pain in the left side of the face and head; ordered half grain morphine.

Eight o'clock, P. M.—Pulse 110; comfortable; ordered an anodyne to be given, if necessary.

Dec. 17th, eight o'clock, A. M.—Passed rather a comfortable night; pulse 95; has taken a little soup; considerable tumefaction about the face; but little pain.

Ten o'clock, P. M.—Pulse 98; doing well; ordered an anodyne, if necessary.

Dec. 18th, ten o'clock, A. M.—Passed an uncomfortable night; feels much more pleasant this morning; pulse 90; removed every alternate pin.

Dec. 19.—Removed all the remaining pins except the one at the commissure of the lips; union by the first intention had taken place for a considerable extent; several strips of adhesive plaster were applied to support the part.

After this the patient continued to improve, nothing occurring worth noting. I neglected to mention that the lint introduced immediately after the operation was removed on the second day, and the parts cleansed with tepid water and a syringe, and more lint introduced. This was done every day or every second day, for the first eight or ten days.

At the expiration of fifteen days, the wound had entirely healed, and the patient was able to walk about the room. The tumefaction had not yet subsided, but had greatly diminished. Two weeks after, making four weeks after the operation, the patient left for home, without any appearance of a return of the disease.

I fear, however, that the disease will some day re-appear, and if so, must necessarily prove fatal in a very short time.

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## ARTICLE IV.

*Nitrate of Silver in Toothache.* By J. S. Dixon, M.D., Ashland, Cheatham County, Tenn.

In the January number of your Journal, I see mention made of the use of nit. arg. in carious teeth. I have been using it in my practice for several years, and have used it in my own teeth when they were aching with decided relief. It can be used with less inconvenience than fluids. I generally place a piece about the size of a grain of mustard seed on a lump of wax, and then place it in the cavity of the tooth, and seal it over with the wax. It will destroy the nerve of the tooth.

# SELECTIONS.

## *St. Louis Medical Society.*

**Dr. McGintie**, President, in the Chair.

Reported by L. Ch. Boilliniere, M. D., Secretary.

**Dr. Pope** related to the Society a successful case of

### OVARIOTOMY.

He had seen the patient only a few days before the operation. She has been married eighteen months and is the mother of a child; the tumor existed, however, before her marriage, and she had been tapped twice, the last time six weeks before the operation. When he saw her, she was bed-ridden, and presented a marked degree of emaciation—there was also anasarca. He saw her then in consultation with Dr. M. M. Pallen.

Dr. Pope, taking in consideration all the circumstances of this case, thought it favorable for an operation.

The patient, although informed of the uncertainty of the prognosis in her case, manifested a rare degree of fortitude. The operation was performed on the first of November, now nearly two months. Prior to proceeding to it, a purgative dose of oil was administered, and on the day of the operation she had her bowels evacuated by an enema. This precaution he considered very important, as the bowels were afterwards to be kept perfectly quiet for a few days by opiates.

She was placed on a table with her legs hanging over the side of it, and brought under the full effect of chloroform. An incision five inches in length, was first carried along the linea alba down to the peritoneum; this was found agglutinated to the external layer of the sac, the interior of this sac having been reached, a bloody, claret-color fluid escaped, which did not however penetrate into the peritoneal cavity on account of the above named adhesions. The incision was then extended two inches more, and a finger introduced in the sac, with the view of drawing it out through the external opening. This sac was, however, found everywhere adherent. These adhesions arose from prior inflammation which had attacked the peritoneum at different points during the course of the patient's illness. By using a certain amount of force, the adhesions were at length broken up and the sac extracted. It was at first thought to be connected with the right ovary and not with the left—the hand could pass all around it on the left side. On that side, a portion of the tumor presented in color the appearance of containing some fœcal-looking matter; but on closer examination, this was recognized as being an additional tumor. The peduncle was twisted twice on itself, and this accounts for the tumor being found on the right side; by twisting upon its base, it had in fact inclined to the right. By this twisting, the peduncle itself was made smaller and harder. During the course of this operation, the bowels were seen only once, they were quiescent when seen. This was undoubtedly to be attributed to the effect of chloroform, and may be considered as a remarkable illustration of its effect—anæsthesia having extended even to the viscera of organic life. A ligature of strong thread was then thrown around the base of the peduncle, and this was drawn out through the external opening.

The next step in the operation was the closing of the opening· This was done by pains and the twisted suture, using for this suture the remainder of the thread used in securing the peduncle. It has been noticed before, that the hanging in the abdominal cavity of the ends of the thread used to tie the peduncle had frequently proved a source of inflammation, perhaps of failure. Opium was given for fourteen days in order to quiet the peristaltic action of the bowels, and the urine drawn three times a day. This precaution he considered very important. Patient was kept on barley water and ice.

About the fourth day a profuse discharge of a bloody, fetid pus occurred. Union by the first intention had then pretty generally taken place. This discharge continued for a few days, and it was not before the twelfth day that healthy pus began to be discharged. The pins were removed on the sixth day. The patient's recovery may be now considered entire.

Dr. Pope would add, that this operation, although formidable, is not so dangerous, in his opinion, as formerly thought. The opening of the abdominal cavity has been by more modern statistics, proven not to be more fatal than the capital operations, such as amputations of the thigh, the ligature of large arteries, etc.

DR. MONTROSE A. PALLEN reported a case of gonorrhœal ophthalmia, followed by the most serious results, producing in the right eye a complete opacity of the cornea, complicated with a staphyloma of the iris, occupying the superior third; upon the left eye there was a vascular opacity of the cornea, adhesions of the iris to the cornea, (synechia anterior,) and an almost total obliteration of the pupil. The patient was able to distinguish light in both eyes, rendered completely helpless by the accident, having to be lead about by his mother. The manner in which he contracted the gonorrhœal ophthalmia was a very common one among certain classes of people, viz., that of bathing the eyes in urine, in order to strengthen the sight: the patient in question performed this vulgar action whilst laboring under an acute attack of gonorrhœa; the results were as described above; and Dr. Pallen thought that an operation on the right eye was not justifiable as the condition of the parts was not such as to warrant it, at least, with any hope of success. Upon the left was performed that operation of artificial pupil, technically known as *Kerato-Iridectomia*, or the method of Cheselden, modified by Desmarres: this consists in making an incision in the cornea, one-half of a line from the sclerotica and parallel to it; then breaking up any adhesions which may exist, by an instrument (a curette) adapted to the purpose, (very extensive adhesions existed in the case in question,) seizing the iris with a rat-toothed forceps drawing a sufficient portion through the wound, and then snipping it off with the curved scissors. The blood flowing freely from the vessels of the iris, obscured what was revealed after its absorption, viz., a cataract which is of the capsulo-lenticular variety, evidently very hard, and which will be extracted as soon as the eye will have recovered sufficient tone to bear a second operation. The operation for the artificial pupil terminated with all of the success to be desired; the only plan of treatment was rest, confinement to a dark room, and ice kept constantly to the eye.

With regard to the propriety of the operation for artificial pupil, Dr. P. continued, there could be no doubt, and since its first proposal by Cheselden in 1727, it had been practised with varied success, by both of the Wenzels, Scarpa, Beer, Jager, Arlt, Græfe, Mackenzie, Desmarres, and a host of others. To Cheselden, however, is due the honor of having first drawn the attention of the profession to this most interesting branch of ophthalmology; and he alone devised the three original kinds of operation, viz., by *separation*, *incision* and *excision*, which have been modified in various ways by different ophthalmologists; these operations are known as *coredialysis*, *corectomia*, *iridotomia*, *iridectomia*, *keratectomia*, *kerato-iridectomia*, *iridotomedialysis*, and others, according to the whim and the method of the operator.

Dr. P. remarked, that he would not enter into any details with regard to the operation, or any rules concerning it, knowing that he could not do justice to it without detaining the Society beyond the limits of a mere report of a case, and should he do so, he would tax the patience of the gentlemen present; neither would he discuss the merits of the different methods, of separation, of incision, or of excision, or detail the conditions necessary for the operation, but simply state that he preferred the method of excision, such as practised upon the case in question, as offering the best chances for success, as attended with a better result, and as being the most surgical.

Dr. Pallen also related a case of an anterior sub-luxation of the humerus, the head of the bone resting partially upon the outer margin of the pectoralis major: it was of six weeks' standing, and a reduction by the pulleys had been attempted in Alton some two weeks previously unattended with success. Dr. P. succeeded in reducing the bone by the old Hippocratic method, the precepts of which are so well indicated by Malgaigne, viz: by forcible extension, sudden flexion and rotation, thus throwing the head of the bone into the glenoid cavity.

DR. W. M. MCPHEETERS reported to the Society a case of

### UNUSUAL RIGIDITY OF THE PERINEUM.

This case, said he, was interesting in many respects, especially in reference to the obstetrical procedure which was resorted to for its relief.

At 9 o'clock, A. M., he was called to a lady then in labor with the first child. Things had proceeded on slowly but regularly, and in the evening the child's head had fairly descended into the pelvic cavity; at midnight, the head reached the perineum, which it considerably distended; the pains then were so frequent and so powerful, the distension of the perineum was such that at every moment he expected to see the issue of the child's head. However, notwithstanding the energetic action of the uterus, continued without intermission, no progress was perceptible. Fearing at this juncture an imminent and extensive rupture of the perineum, he had recourse to venesection to the amount of thirty ounces, to the warm bath, to fomentations, etc.; the state of nausea in which the patient was for several hours, contra-indicated the use of antimonials. In spite of all these means, the rigidity of the perineum gave no signs of yielding, and in order to deliver the patient he feared that no alternative was then left to him, except to lessen the child's head. However, before resorting to this extreme measure, he thought that he would try another means. It was to incise the perineum. This he did by introducing a guarded bistoury at the margin of the extended vulva and performing an incision in the perineum in a diagonal direction, sufficient in length to procure the desired opening; the opening was hardly completed, when, with strong expulsive pains, the child's head made its appearance externally, and was soon followed by the shoulders and the rest of the body. He thought this result very encouraging, and although not aware that this operation had been performed before, he would certainly have recourse to it again under the same circumstances, and would recommend it to others.

He would further remark, that the child was born alive and that the patient recovered without any untoward symptom.

**Dr. Pallen** said, that in his opinion, Dr. McPheeters, under the above circumstances, had adopted a most judicious course of conduct. Not only was the operation warrantable, but it had been recommended by the highest, such as Dr. Blundell He had himself taught this procedure and applied it in similar cases for many years. Lacerations of the perineum were, said he, very much to be deplored and should be prevented with the utmost care. This laceration may extend sometimes very far, involving the sphincter ani, etc. However, in a case of that description, he had observed an admirable proviso of nature, which consisted in the establishment of another internal sphincter for the anus above the seat of laceration, thus preventing the disastrous consequences of this lesion under ordinary circumstances.

**Dr. Hammer**, in reference to the case related by Dr.McPheeters, said, that the procedure he adopted in this instance was a regular obstetrical operation taught and practiced in Germany for many years. Naegele, whom he heard lecturing on this very subject, speaks of this operation as having been of long use in Germany. Dr. Hammer added, that in order to make the incision fulfil its object which was the enlargement of the vula, the incision should be sometimes rather extensive and deep. If the incision, said he, was not sufficient, the pressure of the child's head would certainly continue it and produce thus a ragged cut instead of the clean incision which the knife would perform. He would remark, however, that it is a thing of rare occurrence that the distension of the perineum be so great as to necessitate this operation. By referring to the statistics of the large hospitals, we seldom notice this operation mentioned. In Germany, forceps are generally used in such cases. Their action is to alter the form of the child's head, by elongating it and thus facilitating its passage. Moreover, lessening the rigidity of the perineal muscles by other means; among these, chloroform by inhalations or local fomentations. Kneading the perineum, he said, would also often be of benefit. Killian, of Bonn, recommends this method.

**Dr. Pallen**, in reply to the above remark, said, that he thought that the application of the forceps would have here increased instead of diminishing the difficulties. The forceps, said he, are compressors of the head only to a very limited degree, as shown by Baudelocque. The forceps is mainly an instrument for extraction, a *tire-tete*. Chloroform, said he, was advisable here for many reasons. It does relieve spasmodic muscular action; he had tried it many times with marked success in case where the version was indicated, and where it would have been next to impossible without the relaxing influence of this powerful anæsthetic.—The kneading, spoken of, merits also, said he, commendation; he had practised many years this method, which he once learned from Dr. Linton.

Dr. McPheeters replied, that he was well convinced that in this case an application of the forceps would have inevitably caused a rupture of the perineum. He had often applied them under similar circumstances, but not when there was that degree of rigidity; he added, that fomentations and inunctions of oil had been freely used; the patient was already naturally nauseated so as to preclude the use of antimony, she had been bled to a considerable amount, and the co-aptation of the head to the perineum was so intimate that the very act of introducing the forceps would have produced laceration. Furthermore, there were expulsive pains enough without the forceps. Chloroform was not administered on account of the repugnance of the patient's friends to it. Morever he considered that the very pressure of the child's head was the greatest relaxant that could have been devised; and all the above means, after a fair trial, proved of no avail. But after the incision made in the perineum, the child's head issued without the slightest difficulty.

Dr. Hammer considered the variety of opinion regarding the use of the forceps, in these cases, as a mere matter of discrepancy between two continental schools. In England and America, craniotomy, said he, was outrageously frequent whilst in France and Germany forceps operations were preferred to the former more bloody procedure. The Germans consider that a certain degree of disproportion between the child's head and the pelvis or the perineum may be overcome by a judicious use of the forceps. However, the disproportion is sometimes so great that it can not be overcome. Under the circumstances of Dr. McPheeter's case, the Germans would have used the forceps; there was, it is said, an impossibility of introducing the instrument during the pains, but in the absence of a pain this might have been done. It has been said that the rigidity of the perineum is principally kept up by the presence of the child's head; but the spasmodic contractions of the perineum thus induced, alternate with those of the uterus. By the action of the forceps this alternation is annulled by the continued pressure it allows to be made on the perineum with the child's head, whilst it is embraced in the blades of the forceps.

Naegele, although of a timid temperament, in other things, used the forceps liberally.

The forceps, by compressing the child's head, elongated it. This instrument did not perhaps much diminish the size of the child's head, but by altering its shape it facilitated its passage through a narrow pelvis. Did not nature proceed in the same manner in cases of disproportion between the head and the pelvis? In those cases it was to be remarked that the head was sometimes considerably elongated. In this wise did the action of the forceps imitate the operation of nature.

**Dr. McPheeters** admitted the possibility of this elongation. As for using the forceps in this case, he considered it was utterly impossible either during a pain or in its absence; for the fitting of the head to perineum was so close the patient complained loudly of the mere introduction of the finger, which she compared to a cutting instrument.

As to the spasmodic contractiliy of the perineum referred to by Dr. Hammer, it was altogether destroyed in this case, as will occur whenever the muscular fibre has been acting powerfully for a length of time.

**Dr. M. M. Pallen** thought that so far as this case was concerned, the delay of the passage of the child's head through the vulva was not owing in any degree to inertia of the uterus or to a want of the *vis a tergo*; this existed to a sufficient extent to have procured the birth of the child under ordinary circumstances; but here was a most rigid perineum, against which the child battered in vain—a danger of laceration was imminent as the result of natural forces alone—the forceps, he thought, would have increased the danger of this laceration. A great deal of prudence should guide the accouchenr in deciding upon the cases where the forceps would be useful. He was himself a strong advocate of the forceps under certain circumstances, although he must say that he condemned the use of the *long* forceps under any circumstances. In this, he was aware that he differed from the opinions taught by all accoucheurs even in America, and especially in Germany. He was not, however, inclined to undervalue the great and valuable progress made in the art of obstetrics by the Germans; he knew full well that Naegele had done more than any man, except Baudeloque, to advance this art. But whilst he acknowledged their eminence he did not in everything adopt the teaching of that school; he endorsed the doctrines taught in London and Dublin; he was convinced from statistics, that more women recovered after craniotomy than after the use of forceps when applied above the pelvis. The mortality of the children was also very great in those cases; frequently, also, various ruptures, and also vesico or recto vaginal fistulæ were the result of the imprudent applications of the forceps. Siebold had, said he, applied the forceps once in every seven cases of midwifery which occurred in his practice. This preference of the Germans for the forceps was, he said, not based upon merely scientific reasons, but resulted in a great degree from peculiar religious prejudices.

DR. HAMMER, in reply, denied that the German accoucheurs were influenced by peculiar religious opinions in this matter; their adoption of the forceps, in many cases where it was not employed by the English, was based upon purely scientific grounds. In Germany, the forceps was better studied and understood in all its applications, and selected therefore as a very safe and useful instrument in cases where the English or American accoucheur would, without hesitation, sacrifice the child's life In Germany, in those cases, they tried to save the child and the mother also, and they generally succeeded. In England, one of the reasons why the forceps were not used was on account of that mock modesty so peculiarly British, which did not allow of a woman to be uncovered. Acting on this false modesty they have not encouraged the establisment of lying-in hospitals to the same extent that they have done on the continent.—They do not understand the forceps for want of facilities to study its applications, hence their hesitation in applying it. The Germans, who are familiar with that instrument, are more bold in its employment.

As for the action of the forceps in the case of Dr. McPheeters, he thought that the rigidity of the perineum was owing to a spasmodic contraction of the muscles of that part, comparable to the spasmodic stricture which occur sometimes in the urethra. If a bougie is introduced when one of these spasmodic strictures eixsts, it will impinge against it, without penetrating through it; but if the bougie be left there for a few minutes. the parts will gradually become accustomed to it, and it will at length penetrate though the stricture. The same process will occur in spasmodic contraction of the perineum. This said he, was the rationale of the action of the forceps in those cases. If the child's head be pressed for some time by the forceps on a rigid perineum, the spasmodic contraction of that part will gradually yield. As for the ruptures and vesico or recto-vaginal fistulæ, which according to Dr. Pallen, were often the result of the use of the forceps, he thought that they took place oftener when the forceps were not used, as in those cases which have been left to nature or where craniotomy was performed. Vesico-vaginal fistulæ happen mostly in the protracted cases which had been left to nature.—Statistics would prove this.

In the United States, there are, said he, as many craniotomy cases as there are forceps cases in the rest of the world; because the forceps are not used at all in some cases where it could have been beneficially applied in the beginning of the labor, and craniotomy is resorted to as a last resort. He would not blame the profession here for this state of things; it originated from the want of lying-in hospitals, as he had already remarked.

Dr. Pallen said, that he would see with the greatest satisfaction the establshment of lying-in hospitals in this country, and he expressed the hope that the Biddle Lying-in Hospital, in process of construction in this city, would some day prove a source of practical instruction to students desirous of perfecting themselves in the science of obstetrics. As for himself, he was far from condemning the use of forceps at the inferior strait; he was in the frequent practice of applying it himself—and he had taught its utility for years;—he would add, that his opinion was, that it was not applied in many cases in this country where its usefulness would be incontestible if better understood, and where craniotomy was unfortunately, performed, especially in the country, where the practitioner is often left to himself.

Dr. Smith was one day present, said he, at a lecture on obstetric operations, delivered by Dr. Murphy, of London; in that lecture, he made the startling remark, that statistics would bear him out in the assertion that death oftener followed operations of craniotomy at the superior strait than cæsarean sections.

Dr. Smith said, that as for the rigidity of the perineum giving way under the continued pressure of the child's head, as asserted by Dr. Hammer. he would rather expect to see the rigidity increased under this prolonged pressure; he would expect to see inflammation setting in under these circumstances, and a spasmodic contraction firmly established. As for the procedure employed by Dr. McPeeters, in the case he had reported, he thought it perfectly warrantable and worthy of imitation under similar circumstances.—*St. Louis Medical & Surgical Journal.*

**From the British and Foreign Medico Chirurgical Review.**

## *An Experimental Inquiry into the Function of the Supra-Renal Capsules and their supposed Connexion with Bronzed Skin.* By GEO. HARLEY, M.D., F.C.S., of University College, London.

There are a number of organs in the body that have very generally received the name of "ductless glands." The term gland being applied to them, not on account of their being known to possess any secretion, but simply from the fact of their microscopical structure resembling in many respects that of the ordinary secreting organs.

With regard to their functions, it may be said that nothing is as yet positively known. And it is easy to understand why this should be the case, when we remember that they possess no duct, and consequently their secretion cannot be obtained for analysis, the only direct channel by which we arrive at a knowledge of the special function of any secreting organ. It is true that other methods of investigation are open to us, but these unfortunately are the least perfect, and most circuitous. Moreover, they have frequently been employed by different observers, and invariably yielded only negative results. In this, as in every other department of medical science, much has been written upon what was least understood. We consequently find many theories in circulation regarding the functions of these organs. Take, for example, the supra-renal capsules, which are now about to occupy our attention, and we shall find that they have been at one time or other, agreeably to the fancy of the author, appended to the vascular, nervous, urinary, and sexual systems. Theorists had here ample scope for their talents, there being few facts connected with the history of these organs to lay hold of; they worked in the dark, and the result of their united labors has been the retardation instead of the advancement of science. Fortunately for the present generation, the members of the hypothetical school of medicine are fast dying out, and their ranks are being recruited from among those who can thoroughly appreciate the relative value of fact and theory. In proof of this latter statement, we need only to look at the manner in which the function of the supra-renal capsules has, both at home and abroad, been lately investigated. Instead of men seeking facts in the support of theory, theory has been made altogether subservient to fact. And although, notwithstanding this critical investigation, the function of these organs has not yet been unveiled, many important physiological and pathological facts have been added to their literature.

To Dr. Addison is due the merit of having attracted the attention to, and stimulated men to inquire into the nature of, the supra-renal bodies.

It was after the perusal of his interesting monograph that I, like others, was tempted to try to discover their function. The following paper is the result of the investigation.

In order to make the subject of my communication as concise as possible, I shall divide it into four parts, namely—

1st. The histology of the supra-renal capsules.
2d. Their chemical composition.
3d. The effects of their removal from healthy animals.
4th. Their pathology.

*Morphology of the Supra-renal Bodies.*—On making a transverse section of the supra-renal capsules, they are seen by the naked eye to be composed of two differently colored substances; the external cortical substance being of a yellow color, and sometimes marked with perpendicular striæ; the internal or medullary part, of a slate or reddish-brown hue, and pierced with large openings. These opening are the mouths of the venous sinuses. On a thin section of the cortical portion being placed under the microscope, it is seen to be composed of a large quantity of yellow colored cells, arranged in irregularly-sized rows, placed perpendicularly to the surface, and imbedded in a fibro-areolar matrix. In the human supra-renal capsule, the fibrous nature of the cortical substance, as well as the direction of the fibres, is occasionally sufficiently well marked to be visible to the naked eye on simply tearing or breaking it across.

If the individual cells constituting the rows be examined, they are seen to resemble in size and general appearance the cells lining the uriniferous tubes of the kidney, except that they usually possess a much darker colour. They consist of a homogeneous cell wall filled with variously sized granules, the greater part of which are deeply tinged with yellow pigment. The cells in general contain a considerable quantity of fat, and possess a nucleus, although it is not always visible without the application of reagents. When floating free in the field of the microscope, the cells appear irregularly round, but when grouped together in masses, they have a somewhat polygonal form. In order to study their arrangement in the fibro-areolar matrix, it is necessary to employ very fine sections of the capsules, which, however, are difficult to prepare from the fresh human supra-renal body, especially if it contains much fatty matter. It is therefore advisable to harden the substance of the capsule by keeping it during a few days in a weak solution of chromic acid. After which treatment it will usually admit of being cut sufficiently thin for examination

Considerable difference of opinion exists among histologists regarding the manner in which the cells of the cortical substance are arranged.—Mr. Simmons thinks that the columnar masses which they form are a series of closed tubes lying perpendicular to the surface of the organ; while Kölliker, Ecker, Frey, and most other observers describe the cells as being grouped together in a number of oblong vesicles, lying in parallel rows, but not communicating with each other. Mr. Gray, on the other hand, believes that the adjoining walls of the vesicles are sometimes removed by absorption, and thus give rise to tubular cavities.

My own opinion is, that the cells in the cortical substance of the human supra-renal bodies are grouped together in masses of various lengths, and arranged in the form of rows, which gives to them the appearance of parallel tubes. The sacculi enclosing the cell-masses vary in breadth; sometimes they are wide enough to admit of two, or even three cells lying abreast of each other within them. Occasionally, however, their diameter is only sufficiently to admit of one cell. When they are wide they are usually very short, looking more like round vesicles. When narrow they are generally long; sometimes extending through the whole depth of the cortical substance. If their transverse diameter is sufficient to admit of one cell only, they have usually a very beautiful appearance, in consequence of the single row of cells which compose them, being arranged like a single line of bricks closely set together. These columnar-shaped cell-masses are surrounded by fibro-areolar tissue, in which ramify the vessels and nerves.

As the cortical becomes blended with the medullary substance, the columnar arrangement of the cell-masses disappears, its place being taken by irregularly-sized vesicles containing from one to five cells. The vesicles, which are nothing more than short cell-masses, are unsymmetrically distributed in the medullary substance. They sometimes cease at a short distance from the edge, at other times are scattered almost throughout the whole extent of the medullary substance, from which they are easily recognised by their yellow colour.

I have here avoided using the term "tube," which was applied to the cell-masses by Simon, as I think they scarcely deserve that title. For when examined in transverse sections they are seen to present a very different appearance from that of true tubes; such, for example, as we find in the kidney. In a transverse section of the latter, the cells are seen to be symmetrically arranged on a basement membrane round an opening; while in the former, the cells are more or less irregularly distributed, without having any trace of a central cavity.

In describing the cavities containing the cells, Kölliker speaks of them as mere floculi in the stroma of the organ, possessing no basement membrane. With all due deference to the opinion of my former teacher, which I have just cause to appreciate highly, I must say that I believe Ecker and Frey are correct in stating that the loculi are flined with a homogeneous membrane. I have been able to demonstrate it in longitudinal sections of the cortical substance by carefully washing away some of the cells. The membrane, although exceedingly delicate and transparent, is, however, distinctly visible at those points where it happens to be thrown into folds.

The dark slate-coloured medullary substance has a very different appearance under the microscope from that presented by the cortical part.— When viewed by transmitted light, it is of a paler colour, and with a high magnifying power is seen to be composed of large pale nucleated cells, tolerably regularly distributed in a fibro-granular matrix. In the medullary substance of the supra-renal capsules of some ruminant animals, Mr. Gulliver has noticed large reddish-coloured corpuscles. Kölliker and some others describe the cells in the medullary substance as very closely resembling ganglion corpuscles. To my mind they have much more the appearance of secreting cells, such as we find in the liver and kidney. In describing the structure of the medullary substance of the supra-renal capsule of the land salamander, Leydig speaks of one part of it being almost entirely composed of dirty yellow ganglion corpuscles; and that these through a gradual change in their contents, pass directly into the fatty granular cells proper to the supra-renal body.

The structure of the medullary substance of the supra-renal capsules of the different animals varies very much. In the horse, Frey says that it contains, like the cortical substance, well marked gland vesicles (cell-masses). In birds the medullary is usually not distinguishable from the cortical substance. I have seen an appearance in some human supra-renal capsules similar to that said to occur in the horse, and yet the capsules appeared otherwise healthy.

Upon histological grounds, Kölliker asserts that he would regard the function of the cortical and medullary substances as perfectly distinct from each other. The former part he looks upon as being closely allied to a secreting organ, probably in some way connected with the vascular system; while the latter, in consequence of its richness in nerves, and its containing cells resembling ganglion corpuscles, he regards as an apparatus connected with the nervous system. Leydig and Bergmann go a step farther, and say that the supra-renal capsules stand in so close a relationship with the nervous system, that they ought to be considered as part of it.

*Are the Supra-renal Capsules Fœtal Organs?*—The supra-renal capsules have generally been regarded as organs more particularly belonging to fœtal life. Remak says that they are developed simultaneously with, but independently of, the kidneys, and that they are originally larger than the latter organs. Most writers state that they diminish after birth, both in relative size and in activity of function, with advancing years. This is, however, only true to a certain extent; for although the supra-renal capsules do not bear the same relation to tne size of the adult as they do to that of the fœtus, yet their growth, when compared with that of some of the other internal organs, is very much greater than has been usually supposed.

According to Meckel, in the human embryo, at the third month, the supra-renal capsules and the kindeys are of equal size. At the sixth month the former are to the latter as 2 to 5, and at the ninth month as 1 to 3; whereas after birth the proportion is in the child as 1 to 8, and in the adult as 1 to 28.* These figures certainly speak strongly in favor of the view that the human supra-renal bodies are organs whose function is chiefly performed during fœtal life; but they prove nothing more. On the other hand, the observations that have been made upon these organs in animals by Ecker, Frey, Brown-Séquard, and myself, tend to prove that their function is carried on with considerable activity during adult age. Frey states, that in certain mammalia the relative weight of the supra-renal capsules and kidneys is the same in the adult as in the embryo. Ecker makes a similar remark with regard to the *coluber natrix.* And Brown-Séqnard says, that in dogs, cats, and guinea pigs, the weight of the capsules after birth increases in the same, if not perhaps in a greater, ratio than that of the kidneys. My own observations have been limited to one species of animal—the cat—and are far from being numerous, having only been made upon thirteen fœtal capsules and six adult capsules. But I think they are sufficiently interesting to be here quoted.

I found that five capsules from fœtal kittens, which appeared to be more than two-thirds developed, weight 0.03 grammes; while five kidneys from the same fœtuses weighed 0-31 grammes, making the relative weight of the former to that of the latter, as 1 to $10\frac{1}{10}$. On the other hand, the two supra-renal capsules from the mother of the kittens weighed 0.502 grammes, and the two kidneys 19.167 grammes, thus making the weight of the adult capsule to that of the kidney as 1 to 28.18. On another occasion I found that eight supra-renal capsules taken from kittens immediately after birth weighed 0.110 grammes, while the eight kidneys from the same animals weighed 6.336 grammes. Four capsules, two from the parent of the kittens, and two from another cat, weighed 0.722 grammes; while the four kidneys of the same animals weighed 39.534 grammes. The weight of the supra-renal capsule, therefore, in the kitten at birth is to that of the kidney as 1 to 57.3;[*] and in the adult, in the examples last cited, as 1 to 54.8. But as so few adult capsules and kidneys were employed, it may be perhaps better to take the average of the whole six that were examined (1 to 38.18 and 1 to 54.8) which would then give us the relative weight of these organs in the full-grown animal as 1 to 46.49.[†]

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* **Handbuch der Anatomie, Band iv. p. 507.**

Now if we look upon the average weight of the supra-renal capsule of the new-born cat as being 0.0137 grammes ($\frac{0.110}{8}=0.0137$), and of the kidney as 0.792 grammes ($\frac{6.336}{8}=0.792$); while we regard the average weight of the adult capsule as 0.204) grammes ($0.722 + 0.502 : 6 = 0.204$), and that of the kidney as 9.783 grammes ($39.534 + 19.167 : 6 = 9.783$); we shall find by a very simple calculation that the kidney has after birth increased 12.35 times in weight, while the supra-renal capsule in the same time has increased 14.87 times in weight. What conclusion are we to draw from that fact? We here see that the supra-renal capsules increase in size as age advances at a greater rate than the kidneys. I must here speak with caution, however. Small statistics are dangerous data to draw conclusions from, and perhaps a larger number of observations might furnish us with different results. I think, however, that I may say without reserve that the development of the supra-renal capsules is not arrested after birth; and, moreover, as they continue to increase in size at a certain ratio, they ought not, strictly speaking, to be regarded as fœtal organs—like the thymus gland, for example. I quite agree, therefore, with Dr. Brown when he says,

"Des organes que ne s'atrophient pas, et, encore plus, des organes qui croissent d'une manière notable depuis la naissance jusqua'à l'âge adulte, sont des organes qui fonctionnent; il est donc inexact de dire que les capsules surrénales appartiennent exclusivement à la vie embryonnaire."[‡]

*The Chemistry of the Supra-renal Capsules.*—The chemical literature of the supra-renal capsules may be summed up in a very few words; for, as far as I am aware, there are only two authors who have attempted to give us any information on this point. In the beginning of last year,

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[*] This corresponds exactly with the result obtained by Ecker, who says the relation between the kidneys and capsules in the kitten at birth is as 1 to 56 or to 60.

[†] The relative size of the supra-renal capsules and kidneys varies very considerably in different animals: in the seal, for example, it is as 1 to 150, and in the guinea-pig as 1 to 5. (Frey.)

[‡] Archives Générales de Méd., Oct. 1856.

Monsieur Vulpian communicated to the Société de Biologie the discovery of a very peculiar reaction possessed by the supra-renal capsules of vertebrated animals. He found that an aqueous solution of iodine brought in contact with the medullary substance gave rise to a beautiful rose color. And further, that the greater portion of oxidizing agents acted like the iodine solution, although in a minor degree. Even the oxygen of the air, under the influence of light, produced the same effect. I have repeated Monsieur Vulpian's experiment on the medullary substance of the supra-renal capsules of sheep with success; but am equally at a loss with the author to form an opinion as to the nature of the substance which possesses the strange property alluded to. We as yet know so little regarding the nature of color and coloring matters, that it would be futile to attempt to draw any conclusions with regard to the import of the rose-colored reaction above spoken of.

Not being able to separate the coloring matter, Monsieur Vulpian, in concert with M. Cloez, proceeded to extract the "immediate principles" of the supra-renal bodies; and these gentlemen have recently communicated to the Institute de France as the result of their united labors, the discovery of hippuric and taurocholic acids in the supra-renal capsules of herbivorous animals.[*] But as these substances have been abundantly found in different parts of the animal body, their discovery in the latter organs, although interesting, unfortunately throws no light upon the nature of their functions.[†]

*Physiology of the Supera-renal Capsules.*—Unfortunately, we do not as yet possess much experimental research regarding the function of the super-renal capsules. It is only since the publication of Dr. Addison's monograph that physiologists have attempted to unveil the impenetrable obscurity which hangs around them, by studying the effects of their removal from the bodies of healthy animals And I believe that Gratiolet,[‡] Brown-Sequard,[§] Philipaux,[||] and myself,[¶] are the only observers who have as yet made the result of their observations public. It unfortunately happens, too, that the fruits of our experience have led us - or I should rather say one of us—to opposite conclusions, as will appear in the following pages, where I shall attempt to reconcile some of the discrepancies.

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[*] Comptes Rendus, Sept. 7th, 1857.

[†] Since the preceding remarks were in type, I have seen a communication by Virchow (Archiv f. pathol. Anat. Bd. xii. Hft. 4 u. 5) on the chemistry of the supra-renal capsules, in which he mentions that he has found Leucine in the medullary substance. He likewise confirms the observation of M. Vulpian with regard to the rose-colored reaction.

[‡] Comptes Rendus, 1856. [§] Ib 1856. [||] Ib. 1855–7.

[¶] Reports of the Pathological Society, London, 1857.

In endeavoring to ascertain by direct experiment the function of the capsules, I removed them from several different species of animal: the dog, the cat, the guinea-pig, the mouse, and the rat. And in order to avoid as much as possible the shock which might result from the operation (which is most undoubtedly a severe one,) I invariably rendered the animals insensible, either by the smoke of the common puff-ball or by ether. By so doing, I obtained another advantage, for as the animal remained perfectly still, I was enabled to perform the operation quicker and with much less danger of wounding the neighboring organs. It is perhaps on this account that my operations have been attended with less fatal consequences than those of any other observer.

Brown-Sequard, who I imagine has performed the operation of the removal of the supra-renal capsules as often as any one else, gives the following table as the result of his experience:

| Number and species of animal. | Average. duration of life. Hours. | Minimum. duration of life. Hours. | Maximum. duration of life. Hours. |
|---|---|---|---|
| 51 Rabits, | 9 | 5½ | 14½ |
| 11 Dogs and cats, (adults) | 14 | 7½ | 17 |
| 2 Mice, | 8 | 7½ | 8½ |
| 11 Guinea-pigs, (adults) | 13 | 9 | 23 |
| 2 " (young) | 23½ | 14 | 33 |
| 11 Young cats and dogs, | 37 | 19 | 49 * |

Here it is seen that the adult animals which he operated upon died on an average in twelve hours, while the young or new-born animals lived thirty hours; and this being the case, we can scarcely be surprised that Dr. Brown-Sequard should have concluded that the supra-renal capsules were more necessary to life than even the kidneys; for animals will live two or even three days after the extirpation of the latter organs.

I am happy to state that since the publication of the obove record, Brown-Sequard has continued his researches with more favorable results. He says that of ten rabits from which he extirpated the supra-renal capsules, six died between the seven and tenth hour, and four between the tenth and fourteenth hour after the operation. He adds that these animals died too quickly for it to be possible to attribute their death to peritonitis; further, that the extirpation of the capsules is followed by symptoms which do not occur after injuries of the peritoneum, liver, &c., the symptoms appearing to indicate that the supra-renal bodies have an important influence upon the blood, and that their nerves have a singular power upon certain points of the central nervous system. He thinks that this latter influence manifest itself very distinctly in some cases after the extirpation or the puncture of one of the capsules, the animals being occasionally observed to be seized a few minutes before death by

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* Archives Generales de Med., p. 395, 1857.

vertigo, and rolling over. He concludes his remarks by the abservation, first, "that if these organs are not essential to life, they are at least as important as that of the kidneys, for when they are absent, death in general supervenes more rapidly than after the removal of the kidneys."*

To return to my own experiments. The first animal that I operated upon was an adult cat. She lived nine days after the operation. From this animal I removed the right capsule. The operation lasted only ninety seconds. It was accomplished remarkably easily, and without any hæmorrhage.† When the animal became sensible (she had been narcotized by the smoke of the puff-ball,) she seemed to suffer little or no pain. On the day following the operation, the cat took her food well, ann she continued apparantly in good health up till the eighth day. It was then noticed that she had lost flesh. On the ninth day the cat was found dead. On post-mortem examination, the pupils were observed to be fully dilated. The ahdomen appeared entirely free from any signs of inflamation, with the exception of the peritoneal covering of the kidney on the operated side. It was somewhat opaque, and did not permit the superficial vessels to be seen through it as distinctly as that covering the opposite kidney. The immediate case of death could not be ascertained.

As one of my objects in extirpating the capsules was to ascertain if their removal would be attended by any change of color in the skin or its appendages, I took a nearly white cat, and extracted both supra-renal capsules from it at one time. Twenty-four hours after the operation, the animal was found dead, and in a state of *rigor mortis*. In consequence of its being very fat and vicious, it had been kept fasting during nearly four days before the operation was performed. On post-mortem examination, some lymph was found effused upon one of the kidneys. There was no pus, but all the other signs of peritonitis.

On operating upon animals like the cat and dog, I usually found it necessary to ligature a vein of considerable size, which crosses directly over the middle of the capsule; and thinking that the injury done to this vessel might have caused phlebitis, I put a ligature round half of the left supra-renal capsule of a small white coach-dog, avoiding the vein altogether, and cut away the other half of the organ. The next morning, contrary to what might have been expected from the statement of Brown-Sequard, who says that mere puncture of the organ is rapidly fatal, the dog came running to meet me at the door of the room in which he was confined. He seemed to suffer little or no pain, for he frisked about, and was hungry for his food. Six days afterwards, however, he appeared much less lively, and on the ninth day after the operation, he for the first time refused to take any meat. On the tenth he looked very ill, and on the twelfth he died.

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* Archives Generales de Med. p. 374. 1857.

† The attachments of this capsule were unusually slight for a rightne.

*Post-mortem.*—On opening the abdomen, extensive and intense signs of peritonitis were observed. The intestines were glued together, and flakes of lymph abounded all over the abdominal walls. A large abscess, surrounded by an adventitious membrane, two lines in thickness, occupied the left hypochondriac region. It involved the lower half of the spleen. and rested upon the kidney. It did not, however, include the latter organ. In this case there can be no doubt as to the proximate cause of death; but a question might be raised as to whether the inflammation was excited by the injury done to the supra-renal capsule *per se*, or caused by the presence of the ligature, and damage done to the neighboring parts during the operation.

It being a point of primary importance in the prosecution of these researches to ascertain whether the animals died from the injury inflicted upon them by the operation, or solely from the absence of the supra-renal body, and consequent arrest of its function, I proposed taking two animals of the same species, age, sex, and developement—removing a capsule from one, and inflicting upon the other a similar amount of injury, with the single exception of leaving the capsule *in situ*.

My intention was somewhat sooner filled than I had anticipated, for on operating upon a guinea-pig one day, I found that the capsule was traversed, and so intimately attached to a large vein, that it would be impossible to remove it without doing considerable mischief. I therefore left the capsule where it was. and sewed up the wound. I now took the fellow of this guinea-pig, which was of the same sex, age, and development, and removed from him the capsule of the corresponding side.

Both of these animals died within twenty-four hours after the operation. Being somewhat surprised at the result of this experiment, I repeated it upon two cats that had been kept fasting during twenty-four hours before the operation. The cat from which the supra-renal capsule (the right) was removed, lived two days; the other died during the night of the third day. In the abdomens of both, signs of peritonitis were distinctly visible. To prevent mistake, I have to remark that the animal from which the capsule was *not* removed had somethihg more done to it than the mere wound in the abdominal parietes. Had that been the only injury done, it probably would not have died. The experiment would have been incomplete; for, in removing the capsule from the other animal, the neighboring organs, vessels, and nerves could not escape injury; and, independent of the effect arising from the mere absence of the supra-renal capsule, those other mutilations must be taken into account. In order, therefore, to make both operations as nearly as possible alike, with the exception of the removal of the capsule, I handled the kidney, the liver, and the vessels and nerves around the capsule; but so lightly, that I had no anticipation of causing the animal's death. And I must say, that even now I have no idea why it died; for many a time members of the same species of animal have been submitted to much greater mutilations with but a transient deleterious effect, as some of the experiments which shall afterwards be cited amply prove.

Finding that nothing was to be learned by the above course of procedure, except that death might follow the experiment from another cause than mere absence of the capsule, I began to consider whether or not it would be possible to remove the organ in a manner less likely to mutilate the neighboring parts. The supra-renal bodies being very freely supplied by nerves from the solar and renal plexuses, in ligaturing the bundle of vessels it is impossible to avoid including some of the branches of the nerves in the ligature. I thought of giving up using a ligature altogether, and contenting myself with simply twisting the vessels, because I was aware, from the results of experiments upon nerves in other parts of the body, that a ligature applied to them will sometimes induce a greater amount of irritation than the simple division of the same nerve by the knife.

In November, 1856, having obtained a fine, strong bull terrier dog, I resolved to remove one of his capsules without applying a ligature to the vessels. On exposing the left supra-renal body, however, I found it was traversed by a large vein, in such a manner that it could not be removed by the knife without cutting the vessel. It then occurred to me that it might be possible to enucleate the organ with my fingers, and I accordingly attempted to do so; but I found the capsule too friable. It broke to pieces, and I had to remove it portion by portion. Even then I could not get it all away; there were still some small fragments left. In this case there was little or no hæmorrhage; but as the operation lasted some considerable time, I did not expect to find the animal alive the next day. I was agreeably disappointed, however; and although he looked ill, and refused to take food for the first few days after the operation, he gradually recovered, and in a fortnight I had the pleasusure of seeing him running about. This dog remained in my possession until last April, and never was observed to have a single days' illness, except for a few days when I had cut one of his cervical sympathetics, in order to ascertain the effect of atropine on a permanently-contracted pupil.

The next experiment worthy of notice was one performed upon a large tom-cat. On opening the abdomen of this animal, and touching the right capsule with the point of my finger, I was astonished to find it rough and hard as stone. As it was enucleated with the utmost facility, and without loss of blood, I at once repeated the operation on the left side, with similar success. On making a section of the capsules it was found that a considerable portion of the medullary, as well as of the cortical substance of the organs, had become replaced by a calcareous deposit, which chiefly consisted of carbonate of lime. The remaining portions of the glands contained so much fibrous tissue that the normal structure might be said to have entirely disappeared.*

This case was pregnant with interest to me. Here I had an animal from which nature might be said to have removed the supra-renal bodies; for they were in such an advanced state of disease, that their function, whatever it might be, must have been entirely interrupted. I could therefore study the effects of absence of the organs without the interference of the complicated effects of the operation. The animal at the time of the operation was in excellent health, fat and strong: a most important fact when it is remembered that Dr. Addison supposes that derangement in the function of the supra-renal capsules is accompanied by extreme emaciation and debility. As patients rarely die of supra-renal capsular disease alone, it may yet be a question whether we are right in attributing the emaciation and weakness to the disease of these organs. For here, in the above case, where the capsules were the only organs diseased, the animal's health, if I may judge from the violent display he made of his physical powers, was not in any way deteriorated.

Judging from the size of the supra-renal bodies, I should imagine that the calcareous degeneration did not attack them until after the animal had reached the adult period of life; but whether or not the color of its hair had become changed as the disease advanced, I had no means of ascertaining. The cat, which was of a tabby colour, besides being a valuable subject on account of its enabling me to study the effects of absence of the supra-renal capsular functions without any other complication, was equally interesting in permitting me to ascertain the true amount of injury done in removing the capsules, independent of the arrest of their function—a point which it was impossible justly to appreciate in extirpating healthy organs.

As the operation on this animal had been performed with the utmost facility, and there had been no hæmorrhage, or any apparent injury done to the surrounding parts, except the tearing through the nerves, I felt sanguine of success. My astonishment was therefore great when, arriving at the college next morning, I found the cat dead. What could he have died from? It could not be from the absence of the supra-renal capsular function, for he had lived and thrived after the organs were too diseased to function. It was not from loss of blood, as there had been no hæmorrhage. It could not be from the direct shock of the operation, as it was performed while he was insensible. It was not on account of the mere wound in the abdominal parietes, for laying open the abdomen, and making even a hernia with the intestines, is not sufficient to kill a cat. What, then, could be the cause of death? Will the post-mortem appearances in the abdomen reveal it? Unfortunately they did not.—Nothing, absolutely nothing, was to be seen but a very trifling attempt at peritonitis. The thorax was searched; the brain and spinal cord were examined; the blood vessels were laid open; yet no clue to the cause of death could be detected.

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* These supra-renal capsules were shown to the Pathological Society in the month of February last.

What parts of the body had received injury during the operation besides the abdominal walls, the effects of which we may entirely dismiss from our attention? In removing the capsules their blood vessels, lymphatics, and nerves had been torn across. We had need to dwell long upon the probable effects resulting from the damage done to the two former, for both the blood vessels and lymphatics were insignificant, in consequence of the capsules being in great part a hard mass of inorganic matter. The blood was searched for signs of phlebitis, with a negative result. It was examined for crystals, without more than the usual quantity being detected;* for the flakes of pigment described by Brown-Séquard as blocking up the central capillaries, and none were found.

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† Dr. Brown-Sequard, in his memoir on the supra-renal capsules, says, that in order to obtain crystals from normal blood, it is necessary to use ammonia or some other reagent. This statement must be taken with a certain degree of reserve, for during the last half-dozen years I, like many others, have been in the habit of obtaining crystals from normal blood by simply allowing a drop to dry on a slipof glass, then adding a drop of distilled water, covering it up with a piece of thin glass, and setting it aside to crystalize. Sometimes the crystals are large, and form rapidly, at other times they are small, and occasionally altogether absent; this I imagine depends upon the state of the digestion of the animal from which the blood was drawn. They are sometimes colored, sometimes colorless. Crystals rapidly form in the blood of starved animals, or those that have been subjected to any severe operation. They are usually more easily obtained from the blood of the spleen than that drawn from the general circulation. To those of my readers who take interest in this subject, I would strongly recommend the perusal of an able review on blood crystalization, containing much original matter, by Dr. Sieveking, in the twelfth vol. of this Journal.

The lymphatics were not specially examined. It now remains for us to glance at the probable effects arising from the tearing across of the nerves going to the supra-renal capsulus; these, although small, "are exceedingly numerous. They are derived from the solar plexus of the sympathetic, and from the renal plexuses. According to Bergmann, some filaments come from the phrenic and pneumogastric nerves. They are made up mainly of dark-bordered white fibres, of different sizes, and they have many small ganglia upon them."*

As neither the microscope nor chemical reagents can here much assist us, we must call expermental physiology to our aid, and see what we can discover by reasoning from analogy. The question is what would be the result of mutilating the above-named nerves, independent of the removal of the supra-renal capsules? It is an established fact, that instant death frequently follows sudden injury to the solar plexus. A blow on the epigastrium is often sufficient to prove rapidly fatal to life.

Section of the great splanchnic nerves has been found by Ludwig and Haffer to kill animals in the space of one or two days. The mere pricking or cutting of the semi-lunar ganglion, according to Brown, proves fatal in rabbits in the course of thirty hours; while division of the sympathetic in the neighborhood of the kidney causes death within twenty-three hours after the operation. Such being the case, need we hesitate, in the absence of all other proof as to the cause of death in the above-mentioned experiment, to regard it as probable that the animal died from the injury done, in tearing out the capsules, to the ganglionic system of nerves? I shall again have occasion to recur to this subject.

Having now given my readers a general view of the manner in which the experiments were conducted, and the results obtained, I shall refrain from citing any except those which present the subject of inquiry in a special and important light.

Is the extirpation of the right a more fatal operation than the removal of the left capsule? This question I think I may answer in the affirmative. In proof of this I cannot do better than relate the following experiments:—From two healthy cats I removed the right supra-renal capsules. The one animal died in forty, the other in forty-four hours after the operation. The only symptoms which they presented were those of gradually increasing weakness. On post-mortem examination the abdomens of both showed slight signs of peritonitis.

From two other cats, which could scarcely be regarded as so healthy as the preceeding, in consequence of my having a few days previously divided one of their cervical sympathetic nerves, I extracted the left supra-renal capsules. In one of these animals an abscess formed in the vicinity of the wound, and burst externally on the fourth day after the operation; after which he gradually sank, and died on the eighth day. On opening the abdomen slight signs of peritonitis were found. The internal wound was nicely filled up by omentum, external wound nearly completely healed The other cat never had a bad symptom; and thirty days after the operation he looked so strong and healthy that I resolved to remove also the right capsule.

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* Quain's Anatomy, edited by Professors Sharpey and Ellis, vol. iii. p. 381.

The results of these four experiments, and of several others which I need not cite, I think authorize me to have answered the question at the head of this chapter in the affirmative. Were it necessary, I might relate many others, to prove, that not only in cats, but also in all the different species of animals on which I operated, the removal of the right was, as a general rule, a more fatal operation than the removal of the left supra-renal body. Allowing this statement, then to be a fact, the next question is, why should the extirpation of the right prove so much more fatal than that of the left capsule? M. Gratiolet, whose experiments led him to the same conclusion, thought that it depended upon the proximity of the liver, and the injury received by that organ during the operation, giving rise to hepatitis. At first I was of a somewhat similar opinion; but after seeing several cases of rapid death follow the operation, where neither hepatitis nor even marked peritonitis existed, I felt forced to look for some other cause. A close examination of the two capsules soon showed me that the difference in fatality of the operations could scarcely be said to exist in the function of the one being more important than that of the other capsule; the organs being identical in structure, and nearly of equal size. Perhaps the right may in some cases be a little larger than the left, but this difference is too inconsiderable to account for the great difference in the fatality of the two operations. On studying the anatomical relations of the supra-renal bodies, it was easy to see that the right was much more intimately connected with the surrounding parts than the left, and its removal attended with greater difficulty. The former lies higher in the abdomen than the latter; it is in contact above with the liver, in front with the vena cava, below with the upper margin of the kidney; and behind it in most cases touches the right semilunar ganglion. The left supra-renal body lies farther from the mesial line; it is in contact below with the upper margin of the kidney, in front (usually) crossed by a branch of the vena cava, behind with the parietes of the abdomen, and above with the spleen, but not adherent to it.

The right semilunar ganglion, which is much larger than the loft, lies (in the dog and cat) directly beneath the supra-renal capsule; while the smaller left semilunar ganglion is placed on the left crus of the diaphragm, and internal to the supra-renal body. A glance at these anatomical relations shows that much greater injury is likely to be done to the sympathetic system of nerves in the extirpation of the right than of the left supra-renal capsule. And from what has already been said with regard to the immediate cause of death, probably arising from the mischief done to the ganglions, it is easy to understand why the removal of the right should, as a general rule, prove more rapidly fatal than that of the left supra-renal body.

In the case of double organs, it is usually found that after the removal of one, the other becomes after a time somewhat enlarged, from having taken on the functions of its fellow in addition to its own. I was anxious to see if the same result had occurred in the case of the cat which made such a good recovery after the removal of the left supra-renal capsule. On careful examination, it was found neither inflamed nor hypertrophied; but it must be remembered that only a month had elapsed since the removal of the other capsule. After this latter operation, the animal cried for some hours, as suffering extreme pain. The next day it appeared very much depressed, and on the morning of the third day it was found dead, with the pupils dilated, and in a state of well-marked *rigor mortis.*

On examining the abdomen, signs of peritonitis were seen in the neighborhood of the right kidney, the capsule of which was thickened and opaque. In the wound behind the kidney was a considerable quantity of pus. The great abdominal and thoracic veins were engorged with partly-coagulated blood. The right side of the heart was full of purple-colored blood, on some of which being poured over the surface of a white vessel, it presented that granular look usually seen in blood beginning to putrify. It did not oxygenate readily on exposure to the air. When examined with the microscope, a great number of lymph globules were found in it. No crystals could be obtained from either the liquid or coagulated blood. No signs of inflammation were detected in the large veins. Two of the lumbar lymphatic glands were very much enlarged, especially the one on the right side of the abdomen. It presented a peculiarly beautiful, semitransparent, lobular appearance, such as I had never before witnessed.

The gland was placed in a little water preliminary to preserving it; but the next day it was found to have lost its strange lobular appearance, and looked like an ordinary lymphatic gland. The hypertrophied gland on the left side of the abdomen, on being examined with the microscope, was found full of well-formed circular lymph cells.

I tried to removed the supra-renal capsules from white mice, but I found them too delicate to stand the operation. With rats, on the other hand, I was more fortunate. The rat, indeed, is admirably well suited for this experiment, in consequence of the attachments of its supra-renal bodies being extremely slight. The organ on the left side hangs almost loosely in the abdomen; its vessels and nerves are nearly its only bands of union. On the right side, again, it is somewhat more intimately connected with the neighboring parts, but not sufficiently to give rise to any great difficulty in its removal. The supra-renal capsule of the rat is about the size of a pea, and of a circular form, in consequence of its very slight attachments.*

The following is the result of one of my first experiments upon a white rat. The animal having been rendered insensible, I made an incision on the right side of the abdomen, close under the floating ribs, and removed the supra-renal capsules. Next day, the respirations were 189 in the minute. The animal, however, rapidly recovered, and nine days afterwards it appeared so well, that I removed the left capsule also. The latter came very readily away,—neither knives nor ligatures were required. A single twist with the forceps at once removed it, and without hæmorrhage.

The color of the hair and of the skin was carefully watched without any peculiarity being observed until about ten days after the last operation, when the neck of the animal was noticed to have become denuded of hair: the skin, however, retained its white color. The animal began from this time to refuse food, and seemed gradually to get weaker and weaker, until it died, twenty-five days after the extirpation of the right, and sixteen days after the removal of the left supra-renal capsule. The exterior of the body was carefully examined, but no discoloration of the skin could detected. The portion of the skin that had been denuded of hair was now seen to be covered with a luxuriant crop of young hair, about one-eighth of an inch long, showing that the affection of the cutaneous appendages had not been permanent, but merely transient. It is not at all uncommon for animals to lose part of their hair after severe operations. I have seen this very frequently in rabbits and cats.

On opening the abdomen of this rat, the intestines looked like a gelatinous mass: at the first glance it was impossible to recognise what they were, and it was only on close examination that they were found to be the intestines. Their walls were so thin and transparent that the air-bubbles could be distinctly seen floating in their interior.* The left half of the stomach was healthy, but the right half was in a similar condition to the intestines. It contained a clear amber-colored mucus with a faintly alkaline reaction. This proved that the softening was not produced by the post-mortem action of the gastric juice. A similar condition of the stomach and intestines has been often observed in ill-fed, half-starved children, and more especially in those cases where they die of a depressed condition of the ganglionic nervous system. I believe that the degeneration of the stomach and intestines of this animal may have had for its cause the injury done to the ganglionic system of nerves, especially those branches supplied to the capsules by the solar plexus. The left capsule, as was said, had been extracted with the greatest facility, and on that side the wound in the peritoneum could only be detected on the closest inspection. By the mere examination of the internal parts no one could have imagined that such an operation had been so lately performed.

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* *Vide* the researches of Professor Ludwig Fick on the cause of the form of bones. Gottingen, 1857.

The removal of the right capsule had been attended with some difficulty, in consequence of its closer adherance to the inferior vena cava and neighboring parts. On this side the margin of the liver was found attached to the wound by somewhat strong adhesions. The right side of the stomach only being in a state of gelatiniform degeneration might be owing to the greater injury done to the nerves on that side, for the anatomical reasons before mentioned.

Other experiments on the rat proved more successful. I shall quote the following as it has a peculiar interest on more than one account.

In March last I removed the right supra-renal capsule from a piebald rat. The operation was a very disagreeable one, in consequence of the animal not having been rendered sufficiently insensible. As it lasted several minutes I had little hope of the animal's surviving. Contrary to my anticipations, however, he made a tolerably rapid recovery, and in the beginning of May, as he was in excellent condition, I removed the other capsule. As six weeks had elapsed since the extirpation of the right supra-renal capsule, I carefully examined the left, and compared it with other capsules taken from animals of the same species and age, in order to ascertain if it had become hypertrophied. But in this, as in the case of the cat, I could not find any very marked difference in either its size or appearance. From the effects of the latter operation the animal speedily recovered, and he ultimately (in the course of a month or two) became very fat and healthy-looking. I think, after reading the report of this case, one will scarcely be inclined to assert that the supra-renal capsules are absolutely essential to life, or that the absence of their function is attended with emaciation and debility. I know that some will say that the function of the supra-renal capsules had been in this case vicariously performed by another organ. To these gentlemen I have only to reply that I do not deny this; but that their argument is equally applicable to the human subject, and if they apply it in the one, they ought to apply in the other case also.

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* The intestines of mice and rats are usually somewhat transparent, but nothing in comparison to what was here observed.

With regard to the connexion of the supra-renal capsular function and bronzing of the skin, I shall at present merely remark, that in the case of this rat no increase of pigment was observed to take place. One day I was told by a gentleman who occasionally came to see my animals without supra-renal capsules, that the fact of no deposit of pigment ooccurring in the skin, or its appendages, of white rats after the removal of their capsules, was no argument against the idea that the function of the supra-renal bodies was so to modify the animal coloring matter as to prevent its becoming deposited in the skin. For, said he, the peculiar constitution of the albino is exactly such as to prevent any deposition of pigment taking place. I would bring forward several arguments against this view, were it not that they are rendered entirely unnecessary by the result obtained in this case. The objection raised by the gentleman against the albinoes does not hold good with regard to the piebald animal. Being half brown, it could not have possessed any peculiar idiosyncrasy preventing a deposit of pigment. Yet, notwithstanding that it was without the organs supposed to be essential to the transformation of pigment during a quarter of a year,* no increased deposit either in the skin or its appendages could, after the most searching scrutiny, be detected. What are we to conclude from this fact? Is the theory of bronzed skin untenable in the case of certain animals?

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* One hundred and twenty days after the removal of the right, and eighty days after the extirpation of the left supra-renal capsule, I took away the spleen from this animal. The blood of the spleen immediately after the operation was examined by the gentlemen attending my practical class, and found to contain an immense number of white corpuscles. Only one of the gentlemen, Mr. Mauley, obtained it crystalized. His specimen was full of beautiful rhombic prisms and needle-shaded crystals. The animal died a fortnight after the latter operation. On opening the abdomen, the stomach and part of the intestines were found adherent to the recent wound, while the liver and another part of the intestines were attached to the parts surronnding the old wound on the right side. No supra-renal capsules were found.

Rats not only survive after extirpation of the supra-renal capsules, but even become strong and healthy after the removal of the spleen also. I have at present in my possession some animals from which the spleen and supra-renal capsules were removed when they were a month old. Yet, notwithstanding this, they have grown up without any apparent modification of their functions having taken place, and are now fine specimens of the well-developed adult animal.

Monsieur Philipeaux has even been more successful; he has removed the spleen, the supra-renal capsules, and the thyroid glands from the same animal, and it has afterwards recovered. I removed the thyroids from a rat nine weeks after the removal of its spleen and supra-renal capsules, but the animal died two days after the operation. Its blood crystalized with the utmost facility. The crystals were almost all colorless. In the urine of this animal I found a great number of large bundles of needle-shaped crystals. They appeared to be either hippuric, or a peculiar form of uric acid, but unfortunately I had not a sufficient quantity to ascertain their reactions

While in Paris last summer, Monsieur Philipeaux—whose experiments have led him to the same conclusions as myself—and I repeated our experiments together on a number of young rats, some of which I brought to England with me; and although it is now more than a quarter of a year since their spleens and supra-renal capsules were extirpated, the animals are still alive and well. I intend to breed from them, in order to see if, after the third or fourth generation of animals without spleen and supra-renal capsules, any change in the cutaneous or other functions will be observable. One of the rats that I brought home with me was the offspring of a mother without either the supra-renal capsules or spleen. From it Monsieur Philipeax extracted those organs when it was aged twenty-six days; it is now four months old, and although scarcely so large as the generality of animals of the same species at that age, is yet quite healthy and strong.

From the results of the foregoing expeiiments, I think we may draw the following conclusions:—

1st. The supra-renal capsules are not solely fœtal organs.

2d. The supra-renal capsules are not absolutely necessary to life.

3d. The removal of the right is generally more fatal than removal of the left capsule.

4th. That convulsions do not necessarily follow the removal of the capsules.*

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* In a letter dated November 15th, Professor Virchow informs me that he has

5th. That the absence of their function, (in rats) is attended neither by great emaciation nor debility.

6th. That when death follows upon the extirpation of the supra-renal bodies, it is in most cases in consequence of the injury done to the neighboring tissues; perhaps, most frequently the mutilation of the ganglionic system of nerves.

7th. Absence of the function of the supra-renal bodies is not proved to have any special effect in arresting the transformation of hæmatin, or in increasing the formation of blood crystals.

8th. The suppression of the supra-renal capsular function is not attended by an increased deposit of pigment in the skin or its appendages (in rats.)

9th. The problem of the connexion of bronzed skin and supra-renal capsular disease is more likely to be solved in the dead house than in the physiological laboratory.

*To be Continued.*

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## *Translation from the Gazette des Hopitaux, Paris, Oct.* 8, 1857. *On the Difficulties in Diagnosis in certain Cases of Pneumonia. Clinical Lecture, Hotel Dieu Paris. By Professor* TROSSEAU. Translated by C. G. C.

Scarcely is one initiated into the mysteries of our art, when the diagnosis of a pneumonia is regarded as the easiest thing imaginable; and moreover this is the prevalent opinion in regard to diagnosis of the inflammation of the pulmonary parenchyma. A violent chill at first, then pain in the side; the first, second, and third days, bloody sputa, begining with the color of apricot marmelade, then that of prune juice, then that of rust, etc. Crepitant rale; blowing sound mingled with crepitant rale; blowing sound alone;—bronchophony; in short, intense fever. Such are the leading symptoms of the disease, and he must be badly instructed who observes these morbid phenomena without recognizing them as he would a familiar acquanintance.

All this is very fine and very accurate as a mere book statement, but it is not always the same at the bedside. Listen now to the recital of sever-

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also extirpated the supra-renal capsules, without having noticed the derangement of the central nervous system mentioned by Brown-Sequard. I should add, that I have seen two animals suffer from convulsons after extirpation of the capsules. One, a cat, died soon after, having slightly tetanic symptoms.

al cases which have recently occurred in my services here, which show how difficult a diagnosis may sometimes be.

A man aged fifty years entered the ward of St. Agnes on the fifth day of a Pneumonia. I came to his bed; I observed a subicteroid tint, a moderate difficulty in breathing, and I said there is a disease which resembles a peripnemonia. Why? I shall not tell you now, but in short, the expression of a peripneumonia is only like itself, and when one has seen only a hundred cases defile before him, he learns that such patients have a peculiar stamp.

I interrogated this man in a pneumonial point of veiw.

Have you had a chill? No.

Have you had pain in the side? No.

How did you take the fever? At first had some warmth; the heat augmented and I had a fever.

Do you feel pain in any part? When I take a full breath, I have more restraint on the left side than on the right, but I feel no pain.

Do you cough? Two or three times a day.

Do you expectorate? No.

But what do you spit up when you cough? I do not spit at all.

Nothing, in short, of sputa; and I put him in evry position without any manifestation of pain in the side.

Thus, then, there was no initial chill. Now this symptom is rarely absent in a pneumonia, and it is sufficient of itself in the largest number of cases to lead us to investigate for a pneumonia.

The pain in the side, the cough, the expectoration, were all absent.—We auscculted him and found nothing except the respiration slightly feeble at the summit of the left side. We went over again the stethoscopic examination; and at last on the side of the shoulder at the extreme end of the clavicle, in a circumscribed point not larger than a franc, piece, we perceived a little blowing and a very slight crepitant rale. In the axilla there was nothing heard, nor in the lesser scapular region, nor in any other part of the chest.

Behold now a pneumonia discovered, but you will understand that it was necessary to be very positive about it. My impressions were, however, just; for on that evening, even the blowing occupied all the subclavicular region;—the next day all the superior lobe, the next day all the inferior portion, and on the fourth day he died. His lungs are now before you, and they exhibit a pneumonia of the third stage.

This case shows you on one part that the diagnosis of pneumonia is not always easy, and on the other, that there really exists pneumonia which is essentially malign and suppurative; in effect, such a pneumonia does not follow in any degree the ordinary course, but enters in a trice the suppurative stage..

I need not add that the man was delirious during the two days of his life, which is always the case when death is inevitable from inflammation of the parenchyma of the lungs.

Lately I was called in consultation by one of my confréres for a young lady recently married, who had come from abroad to enjoy the pleasures of Paris for a season. She had been taken sick with severe chill but was much better the following day; on the succeeding one (or third day), she had another chill.

As the patient had come from a country where intermittent fever prevails regularly, her physician naturally thought her disease was a palustrian fever of the tertian type. The Sulphate of Quinia was administered and the paroxysms were arrested, but there remained a slight continued fever. Under these circumstances I saw her. She complained vaguely of a pain in the left side of the chest, but the most careful auscultation revealed, absolutly, no abnormal condition. The husband, the patient, and one waiting upon her, affirmed that there was neither cough nor expectoration. In veiw of the fever and a well marked sub-icteroid tint, we were led to fear a typhus affection; when on the eighth day of her attack she began to cough, and then could be heard a slight blowing at the base of the left lung. In the evening the blowing had increased, and in thirty-six hours after, it extended to the upper portion of the inferior lobe of the same lung, and a pneumonia was fully unmasked.—There was yet no expectoration, however, and scarcely five or six attacks of coughing in the course of the day and night.

Such cases as these you will often meet with in the course of your practice, therefore the duty of your being duly advised in regard to them.

You will remember that six days ago, I requested Professor Grisolle to come and give me the bnefit of experience in order to determine the question of a pneumonia or a pleurisy.

The case was that of a man fifty-three years of age in Saint Agnes Ward, who entered the Hospital with a dullness that occupied all the chest from top to bottom of the left side. The patient had a resonance of the voice resembling a bronchophony, but at the same time simulating egophony at several points. During several days while he remained here, there was no pneumonic expectoration; there were, though, some sputa, slightly green, but not tenacious. There had been no intial chill, but he was delirious during the first night he passed in Hotel Dieu. There was no pain in the side.

On ausculting the man with great care, we found readily this blowing from apex to base, and having in view the delirium and grave character of the symptoms, we decided on pneumonia; but the pain in the side and the chill being absent, we began again to be undecided.

On percussing, we found, as I have already said, an absolute dullness from top to bottom; it seemed more pleuritic than pneumonic. We investigated also for another sign, that is, the want of expansion of that side of the chest, (which never fails to exist in a well marked case of pleurisy,) remarking, however, the existance of a respiratory sound in all the anterior part, and even in the lateral region, phenomena which would not probably exist in a pleurisy, because, unless there had been pre-existent adhesion, the liquid would be level. *Cin. Lancet & Observer.*

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From the Medical and Surgical Reporter.

## *Medical Societies and Clinical Reports.—Philadelphia County Medical Society.*

*Rheumatism.*—Jan. 13th, 1858. Dr. Emerson in the chair. The subject for discussion was rheumatism, on which Dr. R. K. Smith read the following paper. In presenting the subject of acute rheumatism, for the consideration of the society, he did not propose views that have not already received the careful attention of many eminent medical philosophers. There are, however, notwithstanding the varied investigations of the causes, pathology, and treatment of this disease—few medical writers who agree upon either. This diversity of opinion, in regard to one of the most common affections, the physician is called upon to treat—a disease, too, which often involves the very citadel of life, and always entails upon the patient an amount of suffering and helplessness that enlists the warmest sympathy—demands a scrutiny so thorough and searching as to lead to greater harmony in regard to its pathology, and more uniformity in its treatment.

With a disposition to elicit discussion upon some of the unsettled points to which I refer, the following interrogatories are proposed, touching the cause, pathology, and treatment of rheumatic fever.

1st. Is the primary cause of acute rheumatism a morbid poison in the blood, or, is it located in the nervous system.

2d. If in the blood, is it *urea*, or what other poisonous matter?

3d. How can pericarditis, and endocarditis, as consequences of rheumatism, be explained upon the theory that it is a nervous disease?

4th. Are the consequences ultimately fatal?

5th. What tissues are invaded by rheumatic inflammation, and does it ever terminate in suppuration or gangrene?

6th. Do not the remedies found most serviceable in rheumatism, exercise more influence upon a blood poison than upon the nervous system?

7th. Is a strict antiphlogistic treatment proper in an ordinarily robust patient?

8th. What value is attached to the treatment with lemon-juice?

9th. What are the merits of the alkaline treatment?

10th. Of the calomel and opium treatment?

11th. How is the action of colchicum explained, and what is its value as a remedy in rheumatism?

12th Are local applications beneficial, and, if so, what are to be used?

In suggesting these questions, it is proper for me to state the principles which govern me, in the treatment of rheumatism, and to briefly reply to my own questions.

In regard to the first query—the primary cause of acute rheumatism—I hold the doctrine that some morbific agent contained within the blood is the original cause of the disease. That it is this deterioration that constitutes what has been called the "rheumatic dyscrasia." That some pre-existing change in assimilation and excretion renders the system susceptible to the exciting causes of rheumatism; poisonous matter of a peculiar nature is deposited within the blood, and the disease is developed. The evidences adduced, are the absolute changes known to exist; the excess of fibrin, and the alteration in its chemical composition.

To the second question, I answer: Urea is found in the blood of patients laboring under acute rheumatism, and that certain agencies employed for the relief of the diease, eliminate it from the blood by increasing it in the urine. I, however, do not contend for the point that *urea* is the *only* poisonous matter in the blood, that generates arthritic diseases.

The third question, I leave to gentlemen who belive in the nervous origin of rheumatism, to answer. Upon such a theory, I can understand no explanation of the causes of pericarditis and endocarditis, compatible with reason and physiology. Such men as Fothergill, Willan, Morton, McIntosh, and Haygarth, have failed to show the connection, and I shall not attempt it, especially as I do not believe the doctrine.

In reply to question fourth, I believe that pericarditis and endocarditis eventually terminate in death. Not that an attack may not be relieved, in fact, *supposed* to be cured, but that certain structural alterations of the heart occur, which are never entirely removed, and will ultimately terminate life.

The tissues involved in the inflammation of rheumatism, are the fibrous and fibro-serous, and whenever other tissues are invaded, it is in consequence of their near contiguity to the original disease. This disease, I believe, when unattended by any complication, never terminates in suppuration or gangrene.

6th. In regard to the *"modus operandi"* of the remedies which relieve; in rheumatism; this involves the question as to which theory is correct whether it is a disease of the nervous system or of the blood. Adopting the latter view, I can conceive the action of certain substances upon the fluids of the system so as to eliminate or neutralize certain other elements; and I leave to the members the application of their own experience in explanation of the method by which cures are effected through the interposition of the agents they employ.

7th. That the antiphlogistic treatment of rheumatism, followed out in its most rigid sense, has been successful, I know, but that it is the proper course to pursue, in treating this inflammation, I deny. The inflammation and fever which attend rheumatism differ widely from ordinary inflammation; they have more a character of irritation, and present various phenomena unknown in any other inflammatory fever. The state of the skin is one of these peculiarities, and would suggest to every thoughtful man, the propriety of withholding every means that would stimulate the perspiratory organs to further action. Bleeding is unquestionably an important remedy in many cases, and its utility does not oppose the theory that a blood poison produces the disease.

8th. The use of *lemon juice,* in acute rheumatism, according to Dr. Babington, has been eminently successful. Indeed, I may say that, in his hands, its curative effects were astonishing. It will, no doubt, surprise most physicians, to be told that, in a large number of cases treated in this way, the disease was thoroughly cured in from *three* to *eight days,* and without the employment of any other means, whatever, except an occasional dose of the comp. pulv. rhei, when the bowels required it. The doses directed by Dr. B. were from three to six ounces, three times a day, without admixture of any kind. The reason that others have not been so successful with this remedy, he tells us, is because they do not administer it in sufficiently large doses. Dr. Dalrymple unites, also, in ascribing to the lemon-juice extraordinary curative powers, which, if true, there is a value in the remedy which should not be overlooked.—

How it acts has not been explained, but why it should not possess a power to eliminate the poisonous matter from the blood, equal to other remedies, or even in a superior degree, I cannot understand. My own experience in the use of lemon-juice in rheumatism is limited, and, in these large doses, I have had none.

Its efficacy in my hands did not meet my expectations, but this may have been in consequence of the smallness of the dose.

9th. The use of *alkalies*, for the cure of rheumatism, is just now the popular treatment; whether they deserve the first place among the remedies is for experience to determine. They are used chiefly in the form liq. potass. and potass. bicarb., with a solution of the latter in the proportion of ℥j to aqua Oj, as a local application. The question will, no doubt, give us the benefit of our fellow-members' experience. In eliminating or neutralizing the poison, upon which the inflammatory action depends, there appears to be no incompatibility in the harmonious action of such opposite remedies as lemon-juice and liq. potassæ, unless this action be fully explained to be so.

10th. Calomel and opium in rheumatism is a hackneyed treatment which we have all practiced with varied success. The patients have recovered, and we have not pushed the remedies so far as to do them injury. At best, the merits of this course appear to be negative.

11th. Colchicum has been one of my favorite remedies in this disease, but I am free to say that it has frequently disappointed me in the effect anticipated, and never produced the results in my hands which have been attributed to the alkalies and lemon-juice. From some expeirments published by Dr. Maclagan, of Edinburgh, the physiological action of colchicum in diminishing urea from the blood, and passing it off by the urine has been conclusively settled. Whether its beneficial effects are produced by such action is yet uncertain.

12. In regard to local applications in acute rheumatism, my dependence is solely upon leeches and ice, or iced water; the ice or iced water I consider invaluable, and have used it in very many cases, and *never* without the most decided benefit, both as regards the comfort of the patient and the curtailment of the disease. I have repeatedly pursued the inflammation from joint to joint, and from one side of the body to the other in its fugitive course, and for the first time have to see a case of metastais to the heart, where they have been used. I do not belive this result can be brought about by such treatment, *i. e.* that it is productive of it. It may occur under the treatment, but, as I have seen it repeatedly where this remedy had not been resorted to, it would be strange, indeed, if

rheumatism should never metastate where cold applications were used. There is in my judgment unnecessary alarm manifested in regard to the danger of the remedy.

Dr. REMINGTON belived all the tissues were affected by it. He believes that he had seen it the brain, stomach, and bowels. He had seen a serious case of rheumatism of the bowels some years ago, which recovered after a long indisposition extending over three months. The case eight or ten years afterwards, died under quack treatment very suddenly, and with every appearance of a metastasis to the heart, under the use of cold sheets and packing. He also mentioned the case of a girl 12 or 14 years old, who took a bath and then studied her lesson under an open window. He used vin. colch. rad. combined with an anodyne, as morph. sulph., aq. camph., and spt. æth. nit, perhaps the iodide of potassium, or the nitrate, if fever presented. The case recovered rapidly. Along with this he gave a pill of comp. ext. colocynth, acet. ext. colchicum and calomel. After five or six visits she was restored. Nitrate of potass, was very efficacious. Tartrate of antimony, especially in the articular form, he did not like. Lemon-juice he did not rate very high. If there was gout with it, this would certainly do a great deal of mischief. Bleeding was of use sometimes; cupping very advantageous. *Ice* was *never beneficial.* We often see it affecting the heart, and often proves fatal in these cases, hence we should prefer to have it externally rather than internally. In general, physicians, especially the juniors, are too apt to think they do everything and nature nothing. Now he thought the reverse; the *vis medicatrix naturæ* should not be overlooked.

Dr. Bell thought the lecturer was rather brief. A very important thing is to impress on the public mind the risk of its becoming rheumatism of the heart of a grave kind. This is not so fatal as is thought. The sero-fibrous and muscular, were the tissues affected. Shall it be regarded as a blood disease or not? Every disease was to a certain extent a disease of the blood. If we prevent the skin from acting, as where animals have been sealed up as it were, in various experiments, we produce a disease of the blood. The common treatment of venesection is very valuable and important, especially if the heart is attacked. A fact interesting to know, is the proportion of cases of rheumatic inflammation of the articulations to those of the heart. In 136 cases of rheumatism, the heart was affected in 90, as one writer tells us. Dr. B. was better pleased with bloodletting in endocarditis and pericarditis than in other cases. He had treated a case in a young man for another physician with partial relief, when he had a return of it in the heart. He then bled *frequently* and observed as a result, in a subject who was liable to repeated attacks previously, an entire immunity for years after. In more doubtful cases in which stimulants had been used freely, he should not hesitate to bleed, and had in such seen good effect as before, and a freedom from attacks afterwards. The *cure* of the attack occupies us too much to the exclusion of *prevention.* Sometimes he began by a more moderate course, as with colchicum and alkalies, antimony and opium, with relief and an apparent removal of the disease; but it returned: then he had recourse to depletion, as cups or leeches, and not always from the arm in a broken constitution, as from intemperance, &c.

This is not called for in subacute cases, and especially of pericarditis; we may then treat by opium and calomel, and it yields rapidly. In the chronic form with carditis, we have the best effect from iodine, as iodide of potassium, never in full doses, 5 grs. twice a day, with syr. sarsap. comp., or syr. of wild cherry. A far more troublesome form is the subacute, where it seems to get well, patient going about, and has a return of the disease, again laid up with excessive pain night after night. Opium fails to give relief, depletion does not do from the condition of the patient, he then becomes hopeless of relief and quackery is invoked.—Here the skin pours out an acrid sweat. In such cases (though it may seem homœopathic) diaphoretics are of service, but though like to like, yet being in sensible doses it cannot be termed that practice; pulv. ipecac. et opii, or opium with tartar emetic, and the vapor bath comes in with good effect. With a febrile condition, a shower bath, and even cold locally are beneficial. This is best in the acute form of the diseaes, and not when the skin has lost its power, and we have general weakness. He could say little in regard to the use of a particular remedy. He never used persistently one remedy, but varied them according to circumstances, colchicum, bleeding, purgatives, or opium. He had used lemon juice and watched closely its effects, but failed to derive such benefit as has been remarked by others.

Dr. SMITH said, in regard to his paper, that he had no opportunity to make it more elaborate, having been very busy. His object was to present only prominent *points* on the subject, so as to elicit discussion. It especially relates to acute rheumatism, accompanied with high fever; the inflammatory form.

Dr. TURNBULL asked Dr. S. to inform him what treatment he would make use of in a child taken with a chill, vomiting, fever, pulse 120, respiration oppressed, pain in the cardiac region, roughness of the sounds of the heart, and a murmur above the nipple? What course he would pursue if not using depletion and calomel? He had seen pericarditis and endocarditis relieved, and the patient to live some time after. High European authority was in favor of a cure of these affections, and with this treatment. These diseases are on the increase, and he would be sorry to think them utterly incurable. He had seen a case of disease of the heart, developed by influenza, and had seen it subdued by calomel, and subsequently iodide of potassium, in 5 grain doses, and now, three years after, she was entirely well.

Dr. SMITH thought he was misunderstood; he did not mean to propagate the opinion that pericarditis and endocarditis could not be relieved; they could be relieved, and were supposed to be cured; but when there was inflammation of the pericardium, or of the serous membrane lining the heart, he never saw a patient so radically cured that the patient would not die eventually from heart disease, unless cut off accidentally. Cases of heart disease, dying suddenly, &c., when traced back, would be found to have had rheumatism united with an affection of the heart. Not one in ten, that had fallen from heart disease, but had pericarditis or endocarditis, and had been living on in apparent health. In regard to the case of Dr. Turnbull, he would pursue this course: leeches over the heart and meet symptoms in a rational way, as they presented.

Dr. BELL remarked that such cases were carried for years, and hence they should be treated to prevent extensive disease of the valves, which was a common result of neglected endocarditis, but not at all, if treated in a proper manner.

Dr. H. HARTSHORNE believed they were sometimes cured, living at least for many years without any sign of disease. We must not forget, however, the number of fatal cases of heart disease which are not inflammatory in their origin. The local stiffening of the muscles, alluded to by Dr. Bell, and so common as an effect of partial exposure to the cold, he would class under simple inflammation, making a different disease of true articular rheumatism, or rheumatic fever. Many families never have genuine rheumatic fever, or acute articular rheumatism. Whether urea is the poison is very doubtful. When we can trace the effects of urea, retained in the blood, we do not have symptoms of articular rheumatism. The suggestion that it may be lactic acid, in excess, is more free from positive objection, but we know very little of the effect of lactic acid in the blood. Care is certainly needed in the use of cold water to the surface in rheumatism. Dr. H. believed it to be more hazardous when the fever is high than when subdued and more local, as then the poison may be supposed to have been in part eliminated, and the danger of metastasis less. Even the repulsion of the blood from the surface may be, in ordinary cases, a cause of internal inflammation.

Dr. **SMITH** said that Dr. Maclagan, in his experiments, found urea in the blood, and then, under the effect of medicine, it left the blood, and was found in the urine. These facts seemed very conclusve to this point. He would ask the gentleman to explain how cold does repel the blood, &c., and produce metastasis. Experience dose not prove it in acute rheumatism. He would like the *modus operandi* of the process, something more than mere prejudice against the remedy.

Dr. **HARTSHORNE.** Finding urea in the blood does not prove it the cause of rheumatism. Eminent physicians have observed the same thing in other diseases, as typhoid fever. The explanation of metastasis appeared to him very simple, if we take for granted that rheumatism is a disease of the blood. Whatever repels the blood from the surface tends to promote the deposit of morbid material in interior organs. When we pursue the diease from "joint to joint," this is a metastasis occurring under our eyes.

Dr. **EMERSON** (having called Dr. **REMINGTON**, Vice-President, to the chair). Rheumatism depends on different causes. The cold applications he considered, from his own experience, as fraught with danger. He should never forget one case, a stout man, with violent rheumatism of the lower limbs, and especially of the knee-joint. He was under treatment some weeks, and much improved, when Dr. E. had to leave the city, and made arrangements to send a friend, if necessary. The friends of the patient persuaded him to send for a hydropath, who subjected him to packing. The chest became painfully affected, and grew worse with every additional packing; still the hydropath stupidly persevered, and when Dr. E. returned, the wife had just interfered. He found him very bad, so that the least motion, or long breath, caused him to cry out. He was in a very critical condition. Dr. E. restored the disease to its former locality, by warm applications over the joint and lower limbs, and by the pulv. Doveri, and warm draughts, the pain left the heart and chest. In this case, there was every reason to believe that it left a locality where it was not dangerous for a vital position. He wished to call the attention of the members to a remedy which, in one case, produced a sudden and agreeble result: croton oil to the spine and back. It was in the case of a yong man, 19 years of age, with rheumatism in an aggravated form. The oil was applied freely, and getting on the shirt, spread over the back, and produced a most awful condition, and loud complaints fron the patient. He got well, and that faster than any cases Dr. E. had ever seen. He frequently applied it, and with very beneficial result. In regard to attacks of rheumatism in the heart, he knew no treatment so effectual as nitre ʒij, tartar emetic gr. j, calomel gr. j, and opium gr. j, divided into 12 powders, one taken three times a day. In corpulent women, as cooks, we have often complaints of pains at the heart and chest, which are traceable to rheumatic attacks; this treatment, sometimes alternated with, or succeeded by, potassii iodidi, was eminently successful.

Dr. NEBINGER thought he had seen two cases, in which by cold, metastasis was produced from the part affected to the heart. One was a young lady who was out in the evening to a party; shortly after she returned she was seized with violent pain in the ankle. Her mother, attributing it to a pain produced by dancing, poured cold water over it. This produced speedy relief, but immediately after she was seized with violent pain in the chest, oppressed breathing, &c. On being sent for, Dr. N. found, on examination, no reason for a belief in its being a sprain and diagnosticated rheumatism which had undergone a metastasis to the heart. He put the foot in hot water, and after mustard plasters, &c., it returned to its first locality and showed a case of acute rheumatism, by which several joints became affected. Here it was clear, cold water was detrimental. Another case was that of a man who had several times inflammatory rheumatism. On one occasion, after having suffered for several days, by the advice of a friend, he applied ice water and salt to the part. Although he experienced immediate relief in the part, yet violent pains set in in the cardiac region. He was bled freely, and before the bleeding was finished the pain was subdued. Sinapisms and other stimulants were applied to the joints, and after the disease was reproduced there, he was cured by the usual means. Having a predisposition to travel, is it good treatment to encourage it to do so by cold water? Some cases require very little, and others an immense amount of treatment. Of all remedies the "*hackneyed* remedy" is the best and hence he did not like this appellation. He did not like to hear good things called by bad names. Would we apply it to quinine, because so much used in autumnal diseases? Good remedies are solution of nitrate of potassa, colchicum, tartar emetic and opium. In the first severe case he ever saw of articular rheumatism, Dr. N. used cotton to the parts, and nitrate of potassa, tartar emetic and opium; it went on with little or no improvement for several weeks, and he changed the remedies; he at that time feared the use of mercury, feared the production of salivation; by and by, the case not improving, he determined to run all risks and used blue pill, with nitrate of potassa and opium, and in a little time it was cured. He reasoned thus: we have a patient sick a long time, several weeks suffering a great deal, and when grown quite dissatisfied with the treatment, and hope begins to quit us, we have recourse to this Sampson. Why delay? Why make use of the little Davids? Why not call upon Sampson at once? Since the time referred to, he had used mercury in every case of any severity without delay. He emptied the bowels, used the lancet if necessary, and then proceeded as follows ℞. Potassæ nitratis gr. x; Mass. pil. hydrarg. gr. j–jss; Ant. et. pot. tart. gr. $\frac{1}{12}$; M. Give one every 2 hours. Under this he had seen cases get well in ten or twelve days, when under other treatment they would have lasted weeks. He applied cotton to the joints. This was seemingly applying heat to a part already too hot. There is a certain amount of insensible perspiration going on, which collects between the cotton and the part to which it is applied, and this collecting it, acts as a local vapor bath; benefit was thus produced, and this, also, was an argument against the use of cold to the part.

Dr. **Bell** thought the difference in the reports of the experience of the gentleman may result from the different stages' constitutions, &c.—It is a vulgar error that the application of cold drives the blood into the internal organs. The heart responds to the application of cold to the surface, and we have a synchronous depression of its action.

Dr. **Hartshorne** would still have to remain in the *vulgar opinion* in common with all other physiologists except Dr. Bell. He could not consider the application of cold to the part a safe treatment in acute rheumatism.

Dr. **Smith** thought Dr. H. would make the application of cold drive a little *more* poison to the heart. Now Dr. S. contended if there was any poison in the blood it was already in the heart, and that organ was as likely to take on the diseased action from the presence of an ounce as of a gallon of diseased blood. His theory was, that it was not the *amount* of poison that produced the effect. Dr. H. makes a certain amount of poison necessary to derange the organ, if his theory was correct. In regard to the term *hackneyed,* to which so much objection had been taken by Dr. Nebinger, he would say, that he meant to apply to the medicines calomel and opium no opprobrious epithet. On the contrary, there were no articles in the whole Materia Medica he more commonly used in general practice. He simply meant to speak of those remedies as being in almost universal use, and in the hands of the whole profession.

On motion, the society adjourned.

# EDITORIAL AND MISCELLANEOUS.

## Experimental Physiology.

*Ligation of the Heart of a Frog, for the purpose of demonstrating that Medicines, to become active, must necessarily pass through the Arterial system of Vessels.* By Prof. ALBERS, of Bonn.—(*Deutsche Klinik No.* 45.)—[Ed. translation.]

Nothing is easier than to pass a ligature around the base of the heart of a frog. A longitudinal incision passing through the thoracic walls exposes the pericardium, and if this be drawn aside and incised, the heart thus exposed may be surrounded at its base with a ligature. As soon as the circulation is arrested, the heart turns pale—emptying itself of the blood it contains. By degrees it ceases to beat, or if the pulsations continue, become very feeble. These phenomena strikingly resemble those produced by the irritation of the superior portion of the spinal cord by a current of electricity, or the repose of the heart produced by théine and caféine (the active principles of tea and coffee.) The animal, during the time that the heart is ligated, loses none of its activity, conducting itself as before the operation. Frequent respiratory movements are observed if the pleura has not been wounded.

If, at the expiration of a quarter or half an hour, or even an hour or more, the ligature is removed, (which should have been drawn sufficiently tight to have wounded the structure of the organ) the heart resumes its natural color, and as soon as it is filled with blood, commences pulsating. During the arrest of the circulation by the ligation of the heart, the most active medicines introduced into the stomach, or a wound, produce no effect; but, as soon as the ligature is removed, their action commences. It is a remarkable fact, that substances, which, under ordinary circumstances, will not manifest themselves in less time than from three to twelve minutes, will produce an evident effect in from one eighth to a half minute after the ligature is removed when the heart has been ligated half an hour, two hours, or even three hours or more. We can but conclude, from this fact, that the ligation of the heart does not by any means prevent absorption; that substances introduced into the organism readily pass into the veins and lymphatics, notwithstanding the arrest of the circulation, but to become active must pass through the heart and arteries into the capillary system of vessels. Besides, as to the promptitude with which various substances act, there is a marked difference in the same substances upon animals which have not been submitted to the operation above alluded to.

The author has experimented with *digitaline*, *strychnine*, *caféine* and *conicine*, and has observed the same facts.

Thus, for example, a quarter of a grain of the nitrate of strychnine was placed under the skin of a frog, the heart having been previously ligated; at the expiration of three quarters of an hour the poison had produced no effect. The ligature was then removed, and in a quarter of a minute the strychnine had attained all its energy, producing the death of the frog.

The ligation of the heart is greatly preferable to the excision of this organ, when we wish to demonstrate the influence of the circulation upon the activity of medicines or poisons, as the latter operation gives place to hemorrhages which so exhaust the animal that many of the functions are greatly enfeebled or completely suspended.

## Lead Colic.

Until within a few years past, this disease was regarded, by all, as having its seat in the digestive tube; the only difference of opinion between pathologists was in regard to the precise condition of this canal, and the cause of the pain. By some the pain was attributed to a distention of the bowel by gas, the result of constipation; by others, to the contact of the saturnine molecules with the mucous membrane. An occlusion of the intestine by an accumulation of hardened fœces has by others been regarded as the cause of all the pain; others, again, have attributed all to an inflammation of the intestine itself. From the character of the symptoms, however, some pathologists were induced to make farther researches which resulted in an entire change of their views as to the character of the disease—they regarding either the spinal cord or the spinal nerves and great sympathetic as the original seat of the affection. M. Briquet has recently read a paper upon the pathology, &c., of this disease, before the *Acadèmie de Médecine*, in which he contends that the muscles of the walls of the abdomen are alone the seat of the pains in Lead Colic. The following extract from this paper in support of the above opinion, we find in the *Gazette Hebdomadaire* of the 15th Jan.

"1st. If we palpate the abdomen of a patient attacked with Lead Colic, so as to act alone upon the skin and subjacent muscles, or to use friction over the same, the patient experiences the most acute pain. 2d. The contraction, whether active or not, of the muscular fibres at the point where the pain is felt, increases greatly the sufferings of the patient, and in this way interferes with locomotion. 3d. Repose mitigates greatly the sufferings of the patient, and may alone entirely relieve the pain. 4th. The abdominal pains, in Lead Colic, are frequently accompanied either with hyperæsthesia or anæsthesia of the skin covering the painful muscles. The same thing may be observed in hysteria, in conditions where the superficial muscles are so frequently the seat of acute pain, the character of which is not often recognized. 5th. Constipation has no influence whatever over the abdominal pains. 6th. In some cases the abdominal walls are so very painful that there is set up such a state of contraction, as to cause a retraction of the abdomen. 7th. If by therapeutical means, of which we shall speak hereafter, we relieve suddenly and completely the pain produced by the compression of the sensitive muscle, all painful sensations cease at once.

Still, adds the author, I am far from pretending that the digestive tube is in a perfectly normal state in this disease. I admit the existence of some intestinal derangement, but regard it of but little importance. I contend that in every case of colic, when not produced by the direct ingestion of lead by the stomach and bowels, the intestinal derangement is always secondary, and dependent upon other lesions, which in the treatment of the disease, demand our special attention.

## The Pacific Medical and Surgical Journal.

We have received the first number of a Medical Journal with the above title, published in San Francisco, California, and edited by John B. Trask, M. D., and David Wooster, M.D. "The California State Medical Journal" having been allowed to die out for want of patronage, it would seem somewhat hazardous to embark in another enterprise of a similar character, without some reliable assurance of support. We hope, however, with the adventurous gentlemen who have undertaken it, that the medical men of California "have regretted their negligence in the past, and to save the present Journal from a similar fate, will support it with more promptitude and liberality." A Medical Journal in that distant and somewhat isolated region, we should consider *a necessity*, and judging from the first number, we should say unhesitatingly that this Journal will richly deserve the fullest success. We hope the publishers will be able to number among their subscribers many from this quarter of the United States, to whom it would doubtless be found interesting and profitable, the Editors proposing to make it not only a reliable record of the state of Medicine in California, but to make it a medium for the report of the Practice of the Occidental South American Capitals, of the Islands and Oregon. We welcome the Journal to our exchange list, and hope to be able to chronicle its prosperity. It is published monthly at five dollars per annum, or three dollars for six months, in advance.

## Medical College of South Carolina, at Charleston.

We have received a catalogue of the Students at the above Institution, for the Session of 1857–'58, from which we learn that they had in attendance from South Carolina 139; North Carolina, 19; Alabama, 24; Mississippi, 12; Florida, 10; Georgia, 7; Louisiana, 1; Texas, 1; California, 1; New York, 1; Cuba, 1—making in the aggregate 216, connected with which we notice the remarkable fact, that with one exception, they were all undergraduates. This Institution is controlled by *gentlemen* for whom we have great respect, being far too elevated to entertain the petty and discreditable jealousies which are exhibited in some other quarters of the *South*. Long may it continue to flourish, say we.

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## Jefferson Medical College, Philadelphia.

Though we have not received the catalogue of the students of this Institution, we learn from a Philadelphia paper that it is in a flourishing condition, and is well sustained by numbers, (as well as by the talents of its able faculty,) notwithstanding the hard times. “It has a list of 501 students, of whom 126 are from Pennsylvania; 74 from Virginia; 34, North Carolina; 30, Georgia; 25, Mississippi; 26, Kentucky; 25, Alabama; 18, South Carolina; 16, New Jersey; 14, Tennessee; 18, Ohio; 12, Indiana; 10, Maryland, and smaller numbers from other States. Of the whole number, 18 are from New England, 150 from New York, New Jersey and Pennsylvania, 279 from the Southern States, 36 from the free States of the West; or 204 from the North, 279 from the South.”

As we receive reliable information, we shall take pleasure in recording the condition of other Institutions in the country.

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## North-American Medico-Chirurgical Review.

This Journal is out in a new, tasteful and substantial dress, and is evidently rapidly becoming one of the most prominent medical periodicals in the United States. To those who desire the weightier ordnance of the Science, we can confidently recommend this Journal, which will in all probability at no distant day, lead the periodical Medical literature of the country. It is a bi-monthly, of one hundred and ninety-two pages, and under the editorial management of S. D. Gross, M. D., Professor of Surgery in Jefferson Medical College, and T. G. Richardson, M. D., Professor of Anatomy in the Medical Department of Pennsylvania College. The terms of subscription are five dollars per annum in advance, or six dollars at the end of the year.

☞ V. H. Taliaferro, M. D., a promising physician of this city, and a frequent and valuable contributor to this Journal, has been appointed Professor of Materia Medica and Therapeutics in the Oglethorpe Medical College at Savannah.

## Chlorate of Potassa in Typhoid Fever.

Whatever may be the value of the salt, heading this article, in the treatment of the disease indicated, (of which we are not competent to judge, from lack of experience, as well as from the utter uncertainty which overhangs in our minds all remedial agencies in this Fever,) our attention has been arrested by the somewhat striking coincidence of having been furnished with an article for this number of our Journal (which was in the printer's hands,) from a highly intelligent and reliable medical gentleman of this city, V. H. Taliaferro, M. D., lauding the Chlorate of Potassa in the treatment of Typhoid Fever, when we received the first number of the "Pacific Medical & Surgical Journal," containing a paper upon the same subject, by Jas. Morrison, M. D., of California, to which is subjoined a translation of an article from the *Gazette des Hospitaux*, on the "Treatment of Typhoid Fever with Chlorate of Potassa."

Though it has been a number of years since its first recommendation, if these gentlemen are not greatly mistaken in their conclusions, it has never received the attention deserved, and we would therefore commend the subject to the investigation of our readers. The article furnished from this city will be found under the Original head, and the other papers to which allusion has been made, we append.

## *Treatment of Typhoid Fever with the Chlorate of Potassa.*

BY JAMES MORISON. M. D.

[Read before the Pacific Medical and Surgical Association, Dec. 17th, 1857.]

If he is to be regarded as "a public benefactor who makes two blades of grass grow where one grew before," certainly he is not less entitled to this distinction, who discovers and introduces a new remedial agent, possessing specific virtues, capable of resisting, and overcoming morbid action, or of neutralising and paralysing those inexplicable morbid agencies, which derange the whole animal economy, and, if uncontrolled, soon expend the powers of life.

Unfortunately for the credit of medical science, few medicines have continued, for a long time, to sustain the reputation, attending their first employment, while thousands are now regarded as inert or deleterious, which, if we can trust to the annals of medicine, have wrought almost miraculous cures, when administered by those who introduced them.

We have little sympathy with that tendency in the medical profession, for which it has been so oftan justly reproached, to follow in the beaten track, and reject every innovation without examination. We have, on the other hand, as little sympathy with those, who, disregarding the old axiom "in medio tutissimus ibis," rush into the other extreme, into the wild sea of empiricism, affecting to despise those sound principles established by the farther of medicine more than two thousand years ago, and which have been followed by the wisest of his succesors in the investigation and elucidation of medical truth. The Baconian system of philosophy did not originate with him whose name it bears. Hippocrates taught the principles of the inductive philosophy, at the bed-side of his patients, when he gave medical instruction to his pupils. He first observed, collected and classified, the phenomena of disease which he treated according to certain principles derived from observation and experience. It is only by the application of this system that any real advancement can be made in medical science, which has made such rapid progress within the last half century, when the great Napoleon declared "medicine to be a collection of blind prescriptions whose result are more injurious than useful to humanity." Fifty years before, Cullen makes an admission not less flattering to the medical practice of his time. He says: "To me it appears probable that from the practice of medicine as it is at present exercised there arises much more mischief than advantage, and that it would, perhaps, be better for mankind if no medical art existed at all."

Isolated medical facts are of little importance. Observations and experiments must be upon an extensive scale to deduce from them any general laws or principles of practice. The innumerable medical fallacies and delusions which have been and are still in vogue, and which have brought the profession into disrepute, have had their origin in that tendency, which has continued to prevail, of deducing general principles from isolated facts. A remedy for example, has been given, an amelioration soon takes place in the condition of the patient and the medical agent receives the credit of effecting by its specific powers what has been, perhaps, only the result of the efforts of nature, of the "vis medicatrix nature. We cannot be too cautious in estimating the value of new remedies. They must be exhibited in many cases before their specific effects can be fully established.

How often do we find remedies ostentatiously introduced as specifics, and clamed as new, which have been long used by other members of the profession, with, perhaps, a satisfactory result, but without having discovered that they possess any remarkable specific qualities, and who are suddenly surprised that others should discover in them almost miraculous powers, which have so long escaped their own observation.

These observations have been suggested by an article in a late number of a French medical journal, the *Gazette des Hopitaux*, on the treatment of typhoid fever with the chlorate of potash. The author, Mr. Bellentani, formerly connected with the Hospitals of Orleans, claims for this agent, which has been long employed by other members of the profession, remarkable power in controlling and arresting the progress of this disease. This salt was formerly much used as a sedative and refrigerant in phthisis; and Dr. Stevens employed it in malignant fevers and cholera for promoting aterialization of the blood. The writer of this communication during his connection with the Baltimore Infirmary, as Resident Physician, from 1845 to 1849, frequently saw it administered for the treatment of typhoid fever by Prof Chew, of the University of Maryland, and with a success that will appear to confirm the bold and extravagant assertions of the French physician . In the year 1847, of seventy-two cases of typhoid fever which were treated in the Baltimore Infirmary only two had a fatal termination. It will be difficult to find, especially in the reports of Hospital practice, a more favorable result in the treatment of this grave disease. Prof. Chew's prescription was a tablespoonful of the following preparation every two hours, and this was continued until the commencement of convalescence: chlorate of potassa, one drachm; bicarb of soda and gum accacia, of each, two drachms; water, eight ounces.

While Mr. Bellentani is entitled to the credit of having brought this agent prominently before the public for the treatment of typhoid fever, it gives us pleasure to bear testimony to the fact that an American physician, whose "modesty is equalled only by his merits," has for at least twelve years employed the same remedy in the same disease with the most gratifying results.

With these preliminary observations we subjoin a translation of the entire article of Mr. Bellentani, which deserves the consideration of the medical profession. Even if it should appear on farther trial that this agent possesses no positive merits, it has, at least, the negative virtue of being a remedy which may be used with comparative safety in a disease over which medicines, hitherto, have exercised little control.

[*Treatment of Typhoid Fever with Chlorate of Potassa.* By Mr. A. Bellentani, *ex-interne of the Hospitals of Orleans, etc.*]

The efforts of the practitioner should always be directed towards finding a specific to neutralise and curtail those diseases the first cause of which is unknown. Typhoid fever is one of those diseases. It is only by observations and experiments that we can discover the specific causes of diseases, and we are then led by induction to the choice of an agent capable of neutralizing it. Guided by these considerations, I have not hesitated to use in typhoid fever a new agent, so much and so justly vaunted in diphtheritic affections of the mouth. I refer to the chlorate of potassa. For the last six months I have employed it in all forms of typhoid fever; thus far, with excellent effects; the disease has been controlled, its symptoms ameliorated, and convalesence established without delay. I give daily the following portion; gum water, two ounces; lemon syrup, one ounce and a half; chlorate of potassa, two scruples.

I increase the salt of potassa one scruple every other day. I have never given more than two drachms in twenty four hous. For drinks, acidulated infusions, or fresh water taken freely; a lavement of fresh water every day; applications to the abdomen of cold compresses, wet with the following solution: water, one quart; chlorate of potassa, one ounce; muriatic acid, two drachms and a half.

The portion is given every day, and continued until the symptoms amend; when convalescence is about to take place, then I discontinue all medication, and nourish the patient. I have treated by this means a great many typhoid cases; all have entirely recovered in a very short period. Convalescence began between the fifteenth, twentieth and thirtieth days; not in one case beyond the latter period.

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## Professor Means.

As in the January number of this Journal, we announced that our friend, Prof. Alexander Means, had *resigned* the Chair of Chemistry and Pharmacy in the Atlanta Medical College, we now state that Professor Means has subsequently *withdrawn* that resignation, and, therefore, retains his connection with that Institution.

Professor Means has since resigned the Chair of Chemistry and Pharmacy, in the Medical College of Georgia.—*Augusta Medical Journal.*

☞ From the above announcement, it will be perceived that the *Atlanta Medical College*, is now in *exclusive* possession of the services of the eminent gentleman referred to.

## Erratum.

Page 324, last line, in February No. article of Dr. PENDLETON, for *spine* read *skin*.

## Payments for the Journal.

W. H. Moore, N. C., 3d Vol.; M. D. Stribling, Ga., 3d Vol.; J. F. Woodbury, Ga., 3d Vol.; M. A. Leak, Ga., 3d Vol.; Jos. Michaux, Va., 2d and 3d Vol.; W. Burch, Ga., 2d and 3d Vol.: A. S. Mason, Ga., 3d Vol.; T. M. Darnall, Ga., 3d Vol.; T. A. Reines Ga., 3d Vol.

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# ORIGINAL COMMUNICATIONS.

## ARTICLE 1.

*Varieties in Disease.* By **Thomas Pollard**, M. D., Richmond, Virginia.

Every old Practitioner must have been struck with the difference between disease, as described in the books, and as found at the bed-side, and we consider it our duty to warn the young Practitioner, and Medical student of this difference. The descriptions of disease as found in the standard authors is in the main, no doubt correct, but their limited space, and probably want of sufficient pains with some of them, have precluded the mention of many of the irregularities of morbid action.

We propose in a cursory manner, to notice a few of these varieties, enough to show that we must observe for ourselves, and not take the dicta of Medical writers as our guide.

One of the diseases exhibiting many varieties is "Scarlet Fever." We do not always find it coming out on the second or third day of the fever. In some severe cases it does not come out at all, debility, and want of reaction, and finally death preventing it. The writer has seen a case where the eruption was the first symptom, followed 24 hours after by the Fever. In this case the eruption appeared first on the arms and breast, and the face, stopping for ten hours by well defined limits, like Erysipelas, on the middle of the arms and chest, and then travelling over the remainder of the body by degrees This case was well marked, and other cases occurred in the family, one of which terminated fatally, thus proving there could be no mistake in the diagnosis. It is said the eruption of Scarlet Fever is not raised above the surface, but in some cases it is, occasionally assuming a vesicular form, the vesicles resembling sudamina, and then again it is sometimes pustular. The books describing the eruption say it remains out 3 or 4 days, and then begins to decline; whereas, it sometimes remains out 3 or 4 weeks.

Another disease presenting many phases in its symptoms is Typhoid Fever. The popular belief, in which many Medical men seem to participate, is that the affection is necessarily severe, the fact being as we believe, that like most other diseases, it presents all the diversities, from the mildest to the severest form—from malaise, frequent pulse, and languor with ability to keep about, with, or without a little irritation about the bowels, to the well marked fever with the pulse mounting to 150 or 160, Diarrhœa, disturbance about the brain, with delirium, bronchial complication, red fiery tongue, sordes on the gums and mouth, and all the concomitants which go to make up a fearful malady, in fully formed Typhoid Fever. It may be asked how these mild cases in patients scarcely sick enough to go to bed, are recognised. Principally by the attending facts and circumstances, and by exclusion of other diseases from consideration, which have none of these symptoms. Where other cases of the well marked disease are occurring in the family, and these mild attacks supervene in other members, and cannot be attributed to any thing else, we must conclude they are Typhoid Fever. Diarrhœa, or great susceptibility of the bowels to purgatives is laid down as one ot the characteristics of Typhoid Fever, and as a diagnostic symptom in the comparison with Typhus Fever. A case has recently occurred to the writer, of Typhoid Fever, lasting 3 or 4 weeks, in which there was *constipation*, only removed by good doses of purgatives, existing in a family where other cases were prevailing, one of them very severe, and well marked. There could be no mistake by any possibility concerning its true nature, all the other symptoms existing, but irritability of the bowels. Another case has recently occurred in the practice of a medical friend entirely similar. The tongue described as peculiar to this fever frequently does not exist, even in the severe cases—in place of being dry, and glazed, and red, we find it moist, and only slightly furred, and in place of sordes on the gums and teeth, we find them clean. The rose colored spots so often mentioned as very characteristic, and by some as almost pathognomonic, are absent in our latitude in many, probably much more than half the cases. Louis says, out of fifty-seven severe cases he examined, they were only absent in three, and not certainly in those, as the patients were not seen unti they may have faded. Chomel says, they are absent only in one fourth the number. Wood says they are very rarely absent. Such is not the experience of the Medical men of Virginia.

A variety of continued fever with two paroxysms in twenty-four hours has been noticed. Cullen, and probably Good, among the old writers allude to it—none of the moderns, as far as I have been able to ascertain, do. Dr. Wilson, late editor of the "*Stethescope*," in the November No., 1856, of that Journal, has written an article on this subject, and claims these two paroxysms as pathognomonic of *continued* fever. Dr. Mettauer, of Prince Edward, Va., in more hurry to claim the very early observation of this fact, than to prove its truth, comes to the same conclusion—that the two paroxysms in twenty-four hours, is Diagnostic of continued fever. His paper is published in the Stethescope (January, 1857.) We allude to this subject, as an evidence of this variety of continued fever, but with a firm conviction that it is not a frequent condition, and feel sure that the observation of almost every one who has treated continued fever, will confirm the statement of Watson, Wood, Louis, Bartlett, and others on this point, of one slight remission, and one paroxysm in twenty-four hours.

It is scarcely necessary to allude to the multiform varieties of Hysteria. Every Practitioner has been warned, and is on the look-out for the freaks of this protean malady. Still the inexperienced will sometimes be deceived, and possibly too the experienced will make a false diagnosis in some of the many, and wonderful forms Hysteria puts on.

Syphilis, is another disease of multiform appearance, though of late years, French observers have, we believe, properly made two classes of Syphilis, in which all the varieties may be included. If the Practitioner watches as his guide, for the chancre with indurated base, well defined edges, circular, and depressed in centre, as laid down by Hunter, he will doubt about many of his cases being Syphilis, or even venereal. If he adopts the division of Clerc into two kinds, one non-contaminating, with superficial, ill-defined chancre—with bubo ending in free suppuration, and the other variety with well defined, indurated chancre, and indurated bubo, rarely suppurating, contaminating in its character, he will be relieved of his doubts, and difficulties, and know where to place his cases.

We believe we have alluded to a sufficient number of diseases to answer our end—to prove to the Medical man that there is much variety in human maladies, and to induce him to practice close observation and experience in scanning "the ills flesh is heir to."

## ARTICLE II.

*Remarks upon Inflammation as connected with Dental Surgery.* By F. D. Thurman, Dentist, Atlanta, Georgia.

No Diseased action, state or condition of the human system, is of more importance in its tendencies or consequences, than that of inflammation. In fact it is almost a universal attendant in a greater or less degree upon all diseased action. But its symptoms are more strikingly marked in diseases of a local nature. It is characterised by redness, swelling, heat and pain.

The theory of inflammation is not as yet very satisfactorily understood; we have the ingenious constructions of many learned men, though no two seem perfectly to agree. The distension of the capillaries, and increased quantum of blood in the part, is thought by many to be dependent on a want of action in the circulation, whilst others (equally eminent, and I think with more reason,) conclude, that the blood is attracted by an increased action or stimulus of the part; whilst the general mass of Physicians are content to lay aside all theory on the subject, and treat each individual case acccording to the notion that happens to strike them when it is presented.

It is plain to be seen, that these conflicting theories require exactly reverse treatments, and when we take into consideration the important fact, that nearly every case that requires medical assistance is attended with more or less inflammatory action, it certainly seems that the subject demands more attention than Pathologists have bestowed on it.

But to the subject. Inflammation seems to be a wise provision of nature, set up for the purpose of relieving the system of obstructions, and is consequently always the effect and never the cause of the disease which it accompanies. Though a high state of inflammation may, and often does, by prostrating nervous influence, produce corresponding disease, and consequent inflammation of other parts.

Inflammation is certainly a friend to nature, and not an enemy; though it is a friend that requires watching, or it sometimes operates faster than the nervous system is willing, or even able to bear.

By the aid of inflammation, and its termination in suppuration, a foreign body may be removed from almost any part of the system, and cast off at the surface, and during the performance of this astonishing service, this very friend of nature, if suffered to operate too rapidly, will seriously involve other organs, or parts of the system in disease. Though this does not often happen, owing to the fact that nature in her wise provisions seems to act in inverse proportion—that is, she excites a high state of inflammation, and works rapidly in removing small obstructions, but when she attacks a more formidable enemy, she takes more time to prepare for the contest, and then passes quietly and cautiously to a termination. Just so with general or local disease of any kind. In acute diseases, the inflammatory action runs high, and a crisis is soon formed, whilst in chronic cases, the arterial excitement seems to be small in proportion to the small prospect of the patients final recovery. For two striking examples, we will mention Pneumonia and Consumption.

As soon as a part becomes diseased or obstructed, the blood rushes to its relief, and the pain consequent upon this state of things seems to be owing principally to the mechanical distention and consequent pressure upon the delicate nerves of the part. The more confined the parts are, the greater the pain. For instance, the Dental pulp, owing to its close confinement in the bony walls of the tooth, causes most excruciating pain, whilst the gums from the presence of salivary calculus, or old roots of teeth, may remain in a state of chronic inflammation for years, without attracting much attention. No part of the human system is more subject to inflammatory action, than the parts composing the mouth, and this is not surprising, when we take into consideration its numerous and complicated functions, to-wit: speech, prehension, mastication, insalivation, taste, inhalation, expiration, and the numerous and delicately constructed organs necessary to perform these various functions. And in addition to this, the mouth is the seat of the wonderful process of producing two sets of teeth. The first being removed by a gradual absorption of their roots, give place to the second set, which seem to be designed to last through life; but owing to causes too numerous to mention here; they seldom last to very old age. Though they may escape the ravages of decomposition, the economy often treats them as foreign bodies, on account of the salivary calculus or tartar which collects about their necks. All parts of the mouth are subject to inflammation, but I shall only notice at present, that form by which nature rids herself of diseased teeth.

As soon as a tooth or root of a tooth becomes so far diseased, that its deleterious effects are greater than its beneficial, the economy as noticed above, sets to work to get rid of it, but unfortunately this seems to be a very difficult task. No other foreign body seems to be so difficult to dislodge by the process of inflammation and suppuration, as a diseased tooth. This seems to be owing to the want of a sufficiency of fleshy or vascular substance to operate with. The root is only surrounded by a thin periosteal tissue which separates it from the bony walls of the alveolar processes, and notwithstanding this membrane becomes inflamed, and suppurates until it destroys itself, and keeps the root continually bathed in pus, its mechanical position keeps it in place for years, untilfinally after the periosteal tissue is so far destroyed that it can do nothing more, the absorbents on the exterior surface of the alveolus come to its assistance, and actually take down its surrounding bony wall, and leave the tooth or root to float in the gums; after which, it is soon removed by a tooth-pick, the patient's finger, or some other simple means. This process generally occupies from five to fifty years, but if the patient lives long enough, it will most assuredly be accomplished.

I will let these few remarks suffice for the present, though I have not by any means exhausted the subject'

## ARTICLE. III.

### *Extracts from the Records of the Atlanta Medical Society.* By V. H. TALIAFERRO, M. D., Secretary.

Dr. J. G. WESTMORELAND, reported a case of Puerperal Convulsions, in a primapara, at the expiration of the seventh month, of Utero-gestation. Dr. Westmoreland reports, that when he first saw this case, there had been slight uterine contractions, according to the imperfect history received, for five hours. Vertigo, with some uneasiness of the chest, occurred ten hours before the symptoms of uterine contraction, succeeded by head-ache, which last symptom continued up to the time of his first visit, at 12 o'clock at night of 14th March; one-fourth of a grain of acetate Morphine was given, with the view of preventing the premature delivery, but from the irritability of stomach, was rejected. It was repeated, however, until the pains were arrested, in a few hours, and the patient felt comfortable at 4 A. M. At 7, three hours after leaving, was summoned in haste, and found her just recovering from the second convulsion. Chloroform was obtained as speedily as possible, and administered every hour, in the dose of 15 drops; and inhaled when symptoms of a convulsion were discovered, generally with very prompt relief. The uterine contractions were moderate and ineffectual; the os uteri only slightly dilated and rigid. Patient stupid through the day—not rational—delivered at 10 P. M., nearly twenty-four hours from my first visit. Another convulsion came on shortly after delivery. Symptoms of their return with great prostration, were effectually met by stimulants and the inhalation of Chloroform. In six or eight hours after the third convulsion, consciousness was restored, and the case has progressed favorably up to this time, (18th.)

My conclusions are, that in this case, the morphine given to arrest the uterine contractions, added to the liability of convulsions, and might probably have been happily substituted by the Lancet, inasmuch as the opiate failed to control the labor, and as all the circumstances of the case seem now to justify the opinion, that the fœtus was dead in utero, before the contraction of the uterus commenced.

Dr. J. W. JONES, Sr., said:—While he was conscientiously constrained to dissent in part, from the practice in this case, yet he was highly gratified by the frankness and candor of the gentleman with whom he was compelled to differ. That he regarded the report of Dr. W., as highly interesting, and as well calculated to elicit the contrast between present and past Pathology and Therapeutics. He believed that it was of late, too generally the practice of the profession, to substitute anodynes and anesthetics, for less pleasant, but more reliable remedies. That the former, however popular, were in too many instances not appropriate to the indications. He was opposed to the placebo practice; was an advocate of the Lancet in genuine Eclampsia, and seldom administered opiates or anodynes, prior to, or in lieu of venesection in such cases, and believed himself well sustained by both ancient and modern authorities. That opiates when thus employed, should be administered per *anum*, rather than per orem. His experience justified the belief that puerperal convulsions in this country, were more frequent in the robust and plethoric, than in those of opposite constitution and habit. He regarded the disease (puerperal convulsions) as originating in most cases, either in nervous excitability, or hyperemia, or both. That the neuro-hæmatic, etiology, was the middle, the rational and safe ground. He did not consider hysteria, catalepsy, tetanus, &c., as by any means analogous to the disease under consideration. That withholding the lancet in the treatment of puerperal convulsions, was an exception to a general or well-established practice, and rarely justifiable. He did not bleed in every case of eclampsia. Thought his position sustained by both ancient and modern authority. He was not opposed to the timely use of hypnotics and antispasmodics as auxiliaries, but was disposed to rely mainly upon blood-letting and cathartics, as the best prophylactic and curative means in such cases. That the brandy in this case was as much a derivative as was the cathartic, or the sinapisms, and was therefore equally appropriate. The The modus operandi of each, being on the principle *ubi irritatio ibi affluxus.*

DR. LOGAN, considered puerperal convulsions one of the most interesting pathological manifestations which could be presented to the physician, and especially so to him at present, as he believed that a radical error prevailed in reference to the true character of the *condition* from which the disease resulted, and, as a necessary consequence, in the *treatment* of the affection.

He stated, as the result of his observation, that puerperal convulsions were generally found in females of highly organized nervous systems, and who were peculiarly susceptible to irritability of that system, and not among the plethoric and robust—in those who had no superabundance of blood, and did not, therefore, require the active depletion which had been so generally resorted to in the treatment of this affection—rather than in those of an opposite constitution. He did not attach so much importance as medical men generally, to the idea of cerebral congestion, as the cause of this disease, but believed its true pathology to be a peculiar nervous erethism, *dependent upon* the irritable condition of that portion of the nervous structure in connection with the uterus, in consequence of the peculiar condition of that organ during the puerperal state, and thus *predisposing* the female to a convulsive attack upon the addition of an *exciting cause*, which is most usually the occurrence of uterine contraction.

In the treatment of the convulsions, it was considered a matter of the greatest importance to deliver the female, and as aiding this process, in some instances, blood-letting might be beneficial, but as a general rule, he not only considered it unnecessary, but injurious. He had seen the case under consideration, and could state that it had been attended with the most alarming prostration, rather than excitement, and could not possibly have been benefitted by blood-letting, and had required stimulation instead of depletion, and afterwards under the influence of chloroform, the convulsions had been controlled until delivery was effected.

To show still more decidedly the fact, that the convulsions were not dependent upon that condition requiring blood-letting for its removal, after the contents of the uterus were expelled, and during the most extreme depression (the use of the chloroform having been suspended) the convulsions returned with great violence, but were again controlled by the chloroform in connection with brandy, until reaction was fully established, when there was a final disappearance of the eclampsia.

DR. W. F. WESTMORELAND fully concurred with Dr. Logan, as regards the character and treatment of the affection. Regarded the congestion of the brain which exists in some cases as the result, and not the cause of the convulsions. Thinks that much mischief has resulted from the too popular idea, that, in puerperal convulsions, there is always a congestion of the brain prior to the access, and that to relieve the patient, copious blood-letting is essential. He mentioned a case which came under his observation, where the lancet had been resorted to, until an incredible amount of blood had been taken from the arm without arresting the convulsions, and which was afterwards promptly and entirely relieved by the administration of chloroform. Thought, that if there was no other evidences, the treatment which has been found most successful, and which no one would think of employing in congestion of the brain, would be sufficient to controvert the popular opinion of plethora and congestion.

Dr. DARNALL—said, my usual course, when called on to see a patient in the latter period of pregnancy, complaining of the symptoms reported by Prof. J. G. WESTMORLAND, viz: Giddiness, and pain in the head, is about as follows: If there is fever, or if the superficial veins fill up readily, and feel tense, (which can be easily determined by grasping the wrist of the patient firmly with your hand,) I do not hesitate to use the Lancet, with more or less freedom, according to the urgency of the symptoms. If there is much plethora, a *free* bleeding will, generally, be necessary to relieve the patient. No dangerous debility need be apprehended from the loss of blood, if the patient is able to sit up during its flow; for as long since remarked by Dr. MARSHALL HALL, "as soon as the quantity lost, reaches the point of toleration, symptoms will present themselves, which will induce the operator to arrest its flow"—I mean incipient syncope. But Sir, I do not wish to be understood, as advising this course in *all* cases. We sometimes meet with ladies in this interesting situation, whose condition is precisely the reverse of plethora—they have all the symptoms of anemia. Instead of direct depletion, they require anodynes, stimulants, &c., &c.

In regard to the treatment of Puerperal Eclampsia, the Lancet stands in my estimation, pre-eminently at the head of the list of therapeutic agents; because, with it you can rapidly diminish the volume of the blood, and save your patient from the horrors of effusion, or extravasation. There may be cases where venesection may be contra indicated; yet, candor compels me to say that I have not seen such an one. The cases I have seen, with but few exceptions, have been young women in their first pregnancy, with a considerable degree of plethora. I can now only call to mind the case alluded to by my friend, Prof. W. F. WESTMORELAND, and one other case. These were both small delicate ladies, in whom the nervous temperament predominated. Both of these cases lost blood enough—one was relieved entirely by it alone—the other, (the case referred to by Prof. W. F. W.) only partially. Chloroform was then given in doses of twenty or thirty drops, every half hour, for an hour or two, after which, she had no return of convulsions, and was readily and safely delivered of a dead fœtus, in less than twenty-four hours, after their cessation, without the aid of Instruments.

The beneficial effect of Chloroform in this case, was so palpable, that under *similar* circumstances, I would not hesitate to use it again.

Dr. TALIAFERRO, reported the following:

*Gentlemen of the Atlanta Medical Society*:—I propose presenting to you this evening, in a hasty manner, some of the post mortem appearances of a case recently examined by Prof. W. F. Westmoreland and myself, with some few other medical gentlemen. The subject was that of a female who had died after protracted illness, but in consequence of having been attended by another physician whom we did not consult, I am unable to give you a correct history of her symptoms during the period of her confinement.

The following, however, we gathered from the nurse (her mother.)—Age about 20. For some considerable length of time, had been in delicate health, suspected to have had syphilis, and had aborted.

The principal seat of pain we were told, had been in the lower part of the abdomen. The discharges from the bowels and the bladder, had been attended with much pain and difficulty. The urine frequently presenting an appearance, as if intermixed with fœcal matter, and very offensive.

Aside from the above, she had been addicted to the deplorable practice of habitual and excessive snuff using.

The appearance of the interior portion of the stomach of this unfortunate female, I opine, could it have been exhibited to many of our *refined* and *aristocratic* snuff dippers, would have effectually eradicated their cultivated morbid propensity. Upon laying open the abdomen, we at once perceived extensive and serious disease of the bladder and surrounding tissues.

Dr. Westmoreland, with a great deal of care, succeeded in taking out entire, the bladder, the womb and ovaria, vagina and rectum; the specimen of which I have the pleasure of presenting to you. Care was necessary in the extraction of these organs from the abdominal cavity, from the fact of extensive adhesion, and destruction of tissue by ulceration.

The greater and superior portion of the bladder, as you will perceive, has been destroyed by ulceration, which was doubtless syphilitic. The rectum also, was the seat of extensive ulceration, which resulted as you see, in a larger opening through its coats. The large openings in the rectum and bladder communicate with an opening, just beneath one of the broad ligaments and fallopian tube. Above the perforation of the rectum, there is an extensive stricture of the intestine, (barely admitting an ordinary size bougie) and an enormous thickening of its walls. The uterus we found not diseased.

Our examination next extended to the lungs, where we found no abnormal condition, save adhesion and chronic inflammatory action of the lower portion of the right lobe.

The stomach was next examined, and no disease of an organic character detected, but found it partially filled with a thick, dark fluid, which we had every reason to believe, received its color and consistence from its intermixture with snuff. A small quantity of the fluid taken in a cup, very soon deposited a thick sediment, the character of which was unmistakeable.

The entire interior surface of the stomach was thickly lined with a heavy sediment of snuff.

We were told that the subject lay with it in her mouth continually, during the period of her confinement.

This case presents some points of no little interest. In the first place, that life could have been prolonged until the bladder and rectum were so extensively diseased.

In the second place, that a delicate female, much debilitated and emaciated by a loathsome and chronic disease, could have so accustomed her system to the influence of tobacco, as not to have died alone from the amount of snuff her stomach contained at the time of examination.

# SELECTIONS.

*Ethnology of the Negro or Prognathous Race. A Lecture delivered Nov.* 30, 1857 *before the New Orleans Academy of Sciences.* By Sam'l A. Cartwright, M. D.

The natural history of mankind is divided into two parts—Ethnography and Ethnology. The former will be passed over, as it treats of the physical difference among men, their geographical distribution, history, origin, ect; and the latter only will be considered, or that science which investigates the moral and mental differences among the different groups of mankind, and searches for the law on which they depend. There are three principal groups, each of which has maintained the physical traits and mental characteristics peculiar to it, unaltered by time, circumstances or adventitious causes, for a period as far back as history extends. Hence they are called primordial, or primitive. Natural historians designate them, as the white, yellow and black: otherwise, the Indo-European, Mongolian and Prognathous.

The ethnology of the Prognathous or negro race, is the subject under consideration.

When we look around us, we behold four millions of that group of mankind engaged mostly in agriculture, and under subjection to that other group, called Indo-European, Indo-Germanic, Arien, Caucasian, or white. Ethnology is interrogated, to know if this be their *normal condition?* It answers in the affirmative, and its reasons are called for. The question has been answered variously, by religionists and politicians, which has given rise to much angry disputations, recriminations, costly experiments, useless restrictions, senseless alarms and disquietude—all of which might have been prevented, if the subject had been examined as an ethnological one.

Every one of the three primordial groups of mankind, and the subdivisions of those groups into tribes and nations, have their variables instincts, appetites, likes and dislikes, habits, customs, intellectual capacities, moral standards, religious sentiments, ect., distinguishing one from the other, all of which have to be carefully observed through a long series of years before those elementary principles can be reached on which the science of ethnology rests as a basis.

George III. had not studied the ethnology of his colonial subjects in America, or, it would have told him that it was impossible to bend their necks. The flames of Moscow taught Napoleon the ethnical truth, that Russians differ in instincts and habits of thought from Frenchmen—as he knew that nothing would tempt Frenchmen to burn Paris.

The English, Irish and Scotch, have very perceptible shades of difference in character. The whole trio differ essentially from their neighbors across the channel. Ten millions of them, the *bourgeoise*, at the head of civilized nations, differ essentially from the twenty-six millions of unimprovable peasantry, who are even behind the Hindoos and Chinese, as few of them can read or write; whereas, there is scarcely an inhabitant of Hindostan or the Chinese empire who cannot read a book. There is something inherent in the French, which enables them to resist the diseases of this latitude better than most other Europeans, or our own people, of the North and West. The inefficient tisane practice in acute diseases, so generally adopted by them, is a fearful trifling with life when imitated in the treatment of the acute diseases of the Englishman, German or American. Neither the same systems of government nor the same systems of medical practice are alike applicable to all nations and races of people.

Ethnology, therefore, disowns a common standard formula in government, civilization, morals and medicine, as alike applicable to all men.—Where the ethnical elements are different, a common formula is empirical. Diversity of locality as well as diversity of races, should also be regarded. The yellow fever is more obedient to remedial agents in New Orleans than in localities further north. A negro never dies with it in any locality, when treated with regard to his ethnical peculiarities. So strong are they in his favor that, even under mal-practice, death is the exception and recovery, the rule. A number of the prognathous race died in the epidemic of New Orleans, 1853, more from panic, it is believed, than from the yellow fever of that year. Experience and observation prove that panic is very apt to kill a negro, but it is questionable whether the yellow fever *per se* has that power. So seldom does it attack individuals of that race, that Dr. Rush was disposed to regard the negroes as black angels, sent by a kind Povidence to nurse the sick during the terrible yellow fever which ravaged our Northern cities for a number of years in succession, about the close of the last century and beginning of the present. Much abolition capital was made out of the idea that this exemption was due to a special Providence, conferring on them a special opportunity to display their gratitude to those who had advocated the doctrine of their equality. Not only the great Rush, but many other good and distinguished men have fallen into grave mistakes in regard to the prognathous race of mankind, in consequence of not setting in the light of ethnological science. That science proves that the moral and intellectual diversities between the prognathous and Indo-European races, are actually greater than their physical. These diversities have continued as far back as history extends, unalterably the same in every climate and under every variety of circumstances, short of amalgamation. In that case, the offspring is a *tertium quid,* unlike either father or mother, and incapable of perpetuating its existence beyond a few generations. Dr. Day, of the Winnebago agency, avers, that the offspring of the Indian and negro has so little vitality that it ceases to exist after the fourth generation. The Mexicans, a mixture of the Indian, negro and white races, are dying out. The hybrid, from a mixture of the negro with the dark skinned European nations, has more vitality than the Irish, English or American hybrid.

Numbers definite in value reign supreme, unaltered and unalterable, throughout the vast domains of inorganic nature. All the simple elements have separate combining numbers peculiar to them. The combining number of oxygen never varies and never can. Its potential equivalent is always the same. It is the only element capable of forming combinations with all the other elements. Hydrogen is an element, which has not the same capacity for combination as oxygen. It is just as impossible to elevate hydrogen in its combining capacities, as to degrade oxygen. They differ in their potential equivalents as one to eight. It is beyond the power of man, or the chemist's art, to make them equal.

If politicians or religionists should take it in their heads to do so, on some *a priori* reasoning, that being elements at the base of the inorganic kingdom they ought to be equal in potency; and that it was only for the want of well-directed experiments that the latent capacities of hydrogen remained concealed; the chemist could tell them that they might waste millions on such experiments, or destroy empires, to elevate one or depress the other, and they would be no nearer bringing them to a level than when they first began. So, also in the organic kingdom, it is just as impossible to add to or subtract from the inherent potency that nature has measured out to the different types of mankind. The prognathous type of man, after all the costly experiments that have been made to elevate him, remains the same that he was and ever will be in inherent potency, when compared to the Indo-European. Like an inferior planet, he can be drawn out of his natural orbit by a race of superior potency to his own, but sinks into his original status again as soon as he ceases to be acted on and sustained by the exterior power that elevated him out of it. All history proves, that when left to itself the prognathous race has never originated a civilization of its own, or sustained one that had been given to it.

The facts, gathered from all quarters of the extensive domain of ethnological science, have been compared and generalized. They are harmonious in declaring that each of the three great groups of mankind has its own special mode of development, its own special potency and series of expansions into a result, beyond which it cannot pass; that result being the termination of its progress, expresses the realization of the end and object of its creation. The ancient Greeks, in oratory, poetry, painting and sculpture, progressed by successive unfoldings until they arrived at an ultimatum, beyond which the Indo-European race cannot go—its inherent special potency having stretched itself to its utmost tension. The Chinese reached the ultimatum of progress that the Mongolian race is capable of attaining. That progress stopped far short of the point the Greeks reached. The ultimate limit of progress the prognathous race has ever made, stops within the confines of barbarism. There its inherent vital potency gives out and can carry it no further. While the yellow types progressed beyond, but came to a stand-still in the fields lying between barbarism and civilization. None but the white type has ever forced its way and maintained its position in that high order of civilization where moral virtue, clad in intellectual light, rules society. The yellow types, or the Arabs, for instance, in the Medieval ages, have often by adventitious circumstances, been brought within the realm of intellectual and moral light, but have invariably fallen back again into the twilight of semi-civilization, their instincts rebelling against the restraints which the moral influence of that higher order of civilization, whose woman is regarded as the better half of man, imposed on them. Their instincts dragged them down to that lower order of civilization, (*if it* *can be called civilization,)* where the female is regarded as an inferior being and treated as a slave. The Indo-European, or white man, whether in the civilized or savage state, has always instinctively regarded and treated woman as a companion more worthy and entitled to more respect than himself. Cæsar was so well apprised of this ethnical fact that in treaties made with white savages (the Germans) he demanded their women for hostages, well knowing that they put a higher value upon them than upon their most renowned warriors. It is all a mistake about civilization giving liberty to woman, or elevating her in man's estimation. He owes his civilization to her; because he begins to lose it when out of her presence or cut off from her society. So far from any of the yellow or black races, tribes or nations, regarding her as a divinity or as a companion, they all look upon her as a being of an inferior caste, and enslave her. The Chinese, the highest among them, deny to woman the right to choose husbands; the husband's power is unlimited over the wife. She is not only his slave, but is bound to obey every member of his family—his brothers, sisters, uncles, and aunts. The prognathous Australians obtain their wives by knocking them down with a club and wounding them in the foot to prevent them from running away. The Nigritians, or Africans proper, not only enslave their wives, but pave their court-yards with the skulls of the refractory or disobedient. Wealth and power acquired by the husband, so far from elevating the wives, add to their degredation by being used to increase their number. The king of Dahomey, according to the most authentic accounts, has 3333 living wives, besides a vast number whom he has capriciously murdered. Nor does, what is called negro freedom, elevate the colored women, but sinks them lower. The husband holds them in abject slavery; they dare not kill them, as in Africa, but they beat and maltreat them in the cellars of New York, and other places in the Northern States, which they dare not do in the South. The freedom of the husband, is a loss to the women and children. They are in slavery still, and have lost their white protectors. While they and their husbands were in subordination to the white man, equal rights and equality among all the colored population, male and female, young and old, are sedulously maintained, as indispensable on every Southern plantation; all of which is lost to three-fourths of the black population, the women and children, by what is called negro freedom. Nor are the negro men themselves free in anything but name A late celebrated ethnologist; De Gobineau, adduces Hayti as a glaring instance of the futility of the attempt to give a people institutions not suggested by their own genius or instincts. He says, "that there, as in Africa, the negro drinks ardent spirits, butchers his enemies, propitiates his sorcerers, and the rest of the time sleeps."

Under all the appliances of British power to prevent it, the prognathous race of the British possessions on this continent are going the same way as in Hayti. The colonies at Liberia and Sierre Leone would long since have been lost among savages, but for the almost superhuman exertions of the missionaries, and the fortunate aid derived from the apprenticeship system, subjecting the wild Africans to a species of slavery to indolent colonists.

The Nilotic monuments furnish numerous portraits of the negro races, represented as slaves, sixteen hundred years before the Christian era.—Although repeatedly drawn from their native barbarism and carried among civilized nations, soon forget what they learn and relapse into barbarism. If the inherent potency of the prognathous type of mankind had been greater than it actually is, sufficiently great to give it the independence of character that the American Indians possess, the world would have been in a great measure deprived of cotton and sugar. The red man is unavailable as a laborer in the cane or cotton field, or any where else, owing to the unalterable ethnical laws of his character. The white man cannot endure toil under the burning sun of the cane and cotton field, and live to enjoy the fruits of his labor. The African will starve rather than engage in a regular system of agricultural labor, unless impelled by the stronger will of the white man. When thus impelled, experience proves that he is much happier, during the hours of labor in the sunny fields, than when dozing in his native woods and jungles. He is also eminently qualified for a number of employments, which the instincts of the white regard as degrading. If the white man be forced by necessity into employments abhorrent to his instincts, it tends to weaken or destroy that sentiment or principle of honor or duty, which is the mainspring of heroic action from the beginning of historical times to the present, and is the basis of everything great and noble in all grades of white society.—The importance of those particular employments, regarded as servile and degrading by the white man, attended to by the black race, whose instincts are not repugnant to them, will be at once apparent to all those who deem the sentiment of honor or duty as worth cultivating in the human breast. It is utterly unkown to the prognathous race of mankind, and has no place in their language. When the language is given to them they cannot comprehend its meaning or form a conception of what is meant by it. Every white man, who has not been degraded, had rather be engaged in the most laborious employments, than to seem as a lacquey or body-servant to another white man, or being like himself. Whereas, there is no office, which the negro or mulatto covets more than that of being a body servant to a real gentleman. There is no office which gives him such a high opinion of himself, and it is utterly impossible for him to attach the idea of degradation to it. Those identical offices which the white man instinctively abhors, are the most greedily sought for by negroes and mulattoes, whether slave or free, in preference to all other employments. North or South, free or slave, they are ever at the elbow, behind the table, in hotels and steamboats; ever ready, with brush in hand, to brush the coat or black the shoes, or to perform any menial service which may be required, and to hold out the open palm for the dime. The innate love to act as body-servant or lacquey, is too strongly developed in the negro race to be concealed. It admirably qualifies them for waiters and house-servants, as their strong muscles, hardy frames, and the positive pleasure that labor in a hot sun confers on them, abundantly qualify them for agricultural employments in a hot climate.

Hence the primordial cell-germ of the Nigritian has no more potency than what is sufficient to form a being with physical power, when its dynamism becomes exhausted, dropping the creature in the wilderness with the mental organization too imperfect to enable him to extricate himself from barbarism. If Nature had intended the prognathous race for barbarians as the end and object of their creation, they would have been like lions and tigers, fierce and untamable. So far from being like ferocious beasts, they are endowed with a will so weak, passions so easily subdued, and dispositions so gentle and affectionate, as readily to fall under subjection to the wild Arab, or any other race of men. Hence they are led about in gangs of an hundred or more by a single individual, even by an old man, or a cripple, if he be of the white race and possessed of a strong will. The Nigritian has such little command over his own muscles, from the weakness of his will, as almost to starve, when a little caution and forethought would procure him an abundance. Although he has exaggerated appetites and exaggerated senses, calling loudly for their gratification, his will is too weak to command his muscles to engage in such kinds of labor as would readily produce the fruits to gratify them. Like an animal in a state of hibernation, waiting for the external aid of spring to warm it into life and power, so does the negro continue to doze out a vegeto-animal existence in the wilderness, unable to extricate himself therefrom—his own will being too feeble to call forth the requisite muscular exertion. His muscles not being exercised, the respiration is imperfect, and the blood is imperfectly vitalized. Torpidity of body and hebetude of mind are the effects thereof, which disappear under bodily labor, because that expands the lungs, vitalizes the blood and wakes him up to a sense of pleasure and happiness unknown to him in the vegeto-animal or hibernating state Nothing but will is wanting to transform the torpid, unhappy tenant of the wilderness into a rational and happy being—the happiest being on earth, as far as sensual pleasures are concerned. The white man has an exaggerated will—more than he has use for; because it frequently drives his own muscles beyond their physical capacity of endurance. The will is not a faculty confined within the periphery of the body. It cannot, like the imagination, travel to immeasurable distance from the body, and in an instant of time go and return from Aldabaran, or beyond the boundaries of the solar system. Its flight is confined to the world and to limits more or less restricted—less restricted in some than in others. The will has two powers—direct and indirect. It is the direct motor power of the muscular system. It indirectly exerts a dynamic force upon surrounding objects when associated with knowledge. It gives to knowledge its powers. Everything that is made was made by the Infinite Will associated with Infinite knowledge. The will of man is but a spark of the Infinite Will, and its power is only circumscribed by his knowledge. A man possessing a knowledge of the negro character can govern an hundred, a thousand or ten thousand of the prognathous race by his will alone, easier than one ignorant of that character can govern a single individual of that race by the whip or a club. However disinclined to labor the negroes may be, they cannot help themselves; they are obliged to move and to exercise their muscles when the white man, acquainted with their character, *wills* that they should do so. They cannot resist that will, so far as labor of body is concerned. If they resist, it is from some other cause than that connected with their daily labor. They have an instinctive feeling of obedience to the stronger will of the white man, requiring nothing more than moderate labor. So far, their instincts compel obedience to his will as one of his rights. Beyond that, they will resist his will and be refractory, if he encroaches on what they regard as their rights, viz., the right to hold property in him as he does in them, and to disburse that property to them in the shape of meat, bread and vegetables, clothing, fuel and house room, and attention to their comforts when sick, old, infirm and unable to labor; to hold property in him as a conservator of the peace among themselves, and a protector against trespassers from abroad, whether black or white; to hold property in him as an impartial judge and an honest jury to try them for offences, and a merciful executioner to punish them for violations of the laws or usages of the plantation or locality. With those rights conceded to them, no other compulsion is necessary to make them perform their daily tasks than *his will alone*. It is not the whip, as many suppose, which calls forth those muscular exertions, the result of which is sugar, cotton, breadstuffs, rice and tobacco. These are products of the white man's will acting through the muscles of the prognathous race in our Southern States. If that will were withdrawn, and the plantations handed over as a gracious gift to the laborers, agricultural labor would cease for the want of that spiritual power, called the will, to move these machines—the muscles. They would cease to move here, as they have in Hayti. If the prognathous race were expelled from the land, and their place supplied with double their number of white men, agricultural labor in the South would also cease,.as far as sugar and cotton are concerned, for the want of muscles that could endure exercise in the smothering heat of a cane or cotton field. Half the white laborers of Illinois are prostrated with fevers form a few days' work in stripping blades in a Northern cornfield, owing to the confinement of the air by the close proximity of the plants. Cane and cotton plants form a denser foliage than corn; a thick jungle, where the white man pants for breath, and is overpowered by the heat of the sun at one time of day, and chilled by the dews and moisture of the plants at another. Negroes glory in a close, hot atmosphere; they instinctively cover their heads and faces with a blanket at night, and prefer lying with their heads to the fire, instead of their feet. This ethnical peculiarity is in harmony with their efficiency as laborers in a hot, damp, close, suffocating atmosphere—where, instead of suffering, and dying, as the white man would, they are healthier, happier and more prolific than in their native Africa—producing, under the white man's will, a great variety of agricultural products, besides upwards of three millions of bales of cotton, and three hundred thousand hogsheads of sugar. Thus proving that subjection to his will is normal to them, because, under the influence of his will, they enjoy life more than in any other condition, rapidly increase in numbers, and steadily rise in the scale of humanity.

The power of a stronger will over a weaker, or the power of one living creature to act on and influence another, is an ordinance of Nature which has its parallel in the inorganic kingdom, where pondorous bodies, widely separated in space, influence one another so much as to keep up a constant interplay of action and re-action throughout Nature's vast realms. The same ordinance, which keeps the spheres in their orbits and hold the satellites in subordination to the planets, is the ordinance that subjects the negro race to the empire of the white man's will From that ordinance the snake derives its power to charm the bird, and the magician his power to amuse the curious, to astonish the vulgar, and to confound the wisdom of the wise. Under that ordinance, our four millions of negroes are as unalterably bound to obey the white man's will, as the four satallites of Jupiter, the superior magnetism of that planet. Individual masters, by releasing individual negroes from the power of their will, cannot make them free or release them from subordination to the instinctive public sentiment or will of the aggregate white population, which as rigidly excludes them, in the so-called free States, from the drawing room and parlor as it does pots and kettles and other kinds of kitchen furniture. The subjugation of equals to equals by artifice or force is tyranny or slavery; but there is no such thing in the United States, because equals are on a perfect equality here. The subordination of the Nigritian to the Caucasian would never have been imagined to be a condition similar to European slavery, if any regard had been paid to ethnology. Subordination of the inferior race to the superior is a normal, and not a forced condition. Chains and standing armies are the implements used to force the obedience of equals to equals—of one white man to another. Whereas, the obedience of the Nigritian to the Caucasian is *spontaneous,* because it is normal for the weaker will to yield obedience to the stronger. The ordinance which subjects the negro to the empire of the white man's will, was plainly written on the heavens during our Revolutionary war. It was then that the power of the united will of the American people rose to its highest degree of intensity. Every colony was a slave holding colony excepting one; yet the people, particularly that portion of them residing in districts where the black population was greatest, hastened to meet in the battlefield the powerful British armies in front of them, and the interminable hosts of Indian warriors in the wilderness behind them, leaving their wives and children, their old men and cripples, for seven long years, *to their negroes to take care of.* Did the slaves, many of whom were savages recently imported from Africa, butcher them, as white or Indian slaves surely would have done, and fly to the enemy's standard for the liberty, land, money, rum savage luxuries, and ample protection so abundantly promised and secured to all who would desert their master's families? History answers that not one in a thousand joined their master's enemies, but on the contrary, they continued quietly their daily labors, even in those districts where they outnumbered the white population ten to one. They not only produced sufficient breadstuffs to supply the families of their masters, but a surplus of flour, pork and beef was sent up from the slave-holding districts of Virginia to Washington's starving army in Pennsylvania. (See Botta's History.) These agricultural products were created by the labor of savages naturally so indolent in their native Africa, as to prefer to live on ant eggs and caterpillars rather than labor for a subsistence; but for years in succession they continued to labor in the midst of their masters' enemies—dropping their hoes when they saw the red-coat, running to tell their mistress and to conduct her and the children through by-paths to avoid the British troopers, and when the enemy were out of sight, returning to their work again. The sole cause of their industry and fidelity is due to spiritual influence of the white race over the black.

The empire of the white man's will over the prognathous race is not absolute, however. It cannot force exercise beyond a certain speed; neither the will nor physical force can drive negroes, for a number of days in succession, beyoud a very moderate daily labor—about one-third less than what the white man voluntarily imposes on himself. If force be used to make them do more, they invariably do less and less, until they fall into a state of impassivity, in which they are more plague than profit—worthless as laborers, insensible and indifferent to punishment, or even to life; or, in other words, they fall into the disease which I have named Dysesthæsia Ethiopica, characterized by hebetude of mind and insensibility of body, caused by overworking and bad treatment. Some knowledge of the ethnology of the prognathous race is absolutely necessary for the prevention and cure of this malady in all its various forms and stages. Dirt eating, or Cachexia Africana, is another disease, like Dysesthæsia Ethiodica, growing out of ethnical elements peculiar to the prognathous race. The ethnical elements assimilating the negro to the mule, when compared with the horse, although giving rise to the last named disease, are of vast importance to the prognathous race, because they guarantee to that race an ample protection against the abuses of arbitrary power. A white man, like a blooded horse, can be worked to death. Not so the negro, whose ethnical elements, like the mule restrict the limits of arbitrary power over him. Among the four millions of the prognathous race in the United States, it will be difficult, if not impossible, to find a single individual negro, whom the white man, armed with arbitrary power, has ever been able to make him hurt himself at work. It is beyond the power of the white man to drive the negro into those long continued and excessive muscular exertions, such as the white laborers of Europe often impose upon themselves to satisfy a greedy boss, under fear of losing their places and thereby starving themselves and families. Throughout England, nothing is more common than decrepitude, premature old age, and a frightful list of diseases caused by long continued and excessive muscular exertion. Whereas, all America can scarcely furnish an example of the kind among the prognathous race. The white men of America have peformed many prodigies, but they have never yet been able to make a negro overwork himself.

There are other elements peculiar to the Nigritian, on which the disease, called negro consumption, or Cachexia Aicana, depends. But these belong to that class which subject the negro to the white man's spiritual empire over him. When that spiritual empire is not maintained in all its entirety, or in other words, when the negro is badly governed, he is apt to fall under the spiritual influence of the artful and designing of his own color and Cachexia Africana, or consumption, is the consequence. Better throw medicine to the dogs, than give it to a negro patient impressed with the belief that he has walked over poison specially laid for him, or been in some other way tricked or conjured. He will surely die, unless treated in accordance with his ethnological peculiarities, and the hallucination expelled.

There never has been an insurrection of the prognathous race against their masters; and from the nature of the ethnical elements of that race, there never can be. Hayti is no exception, it will be seen, when the true history of the so-called insurrection of that island is written. There have been neigborhood disturbances and blood-shed caused by fanaticism, and by mischevious white men getting among them and infusing their will into them, or mesmerizing them. But fortunately, there is an ethnological law of their nature which estops the evil influence of such characters by limiting their influence strictly to personal acquaintances. The prognathous tribes in every place and country are jealous and suspicious of all strangers, black or white and have ever been so.

Prior to the Emancipation Act in the British West Indies, the famous Exeter Hall Junto sent out a number of emissaries of the East India Company to Jamaica, in the garb of missionaries. After remaining a year or two in the assumed character of Christian ministers, they began to preach insurrectionary doctrines, and caused a number of so-called insurrections to break out simultaneously in different parts of the island. The insurgents in every neighborhood were confined to the personal acquaintances of the Exeter Hall miscreants, who succeeded in infusing their will only into those who had listened to their incendiary harangues.

This was proved upon them by the genuine missionaries, who had long been on the island, and had gathered into their various churches a vast number of converts. For, in no instance, did a single convert, or any other negro, join in the numerous insurrectionary movement, who had not been personally addressed by the wolves in sheep's clothing. The Christian missionaries, particularly the Methodist, Baptist, Moravians and Catholics, were very exact in collecting the evidences of this most important ethnological truth, in consequence of some of the planters, at the first outbreak, having confounded them with the Exeter Hall incendiaries. The planters finally left the Christian missionaries and their flocks undisturbed, but proceeded to expel the false missionaries; to hang their converts, and to burn down their chapels. The event proved that they were wrong in not hanging the white incendiaries; because they went home to England, preached a crusade—traveling all over the United Kingdom—proclaiming, as they went, that they had left God's houses in flames throughout Jamaica, and God's people hanging like dogs from the trees in that sinful island. This so inflamed public sentiment in Great Britain against the planters, as to unite all parties in loud calls for the immediate passage of the Emancipation act. There is good reason to believe that the English Ministry, in view of the probable effect of that measure on the United States, and the encouragement it would afford to the culture of sugar and other tropical products in the East Indies and Mauritius, had previously determined to make negro freedom a leading measure in British policy, well knowing that its effect would be to Africanize the sugar and cotton growing regions of America. The ethnology of the prognathous race does not stop at proving that subordination to the white race is its normal condition. It goes further, and proves that social and political equality is abnormal to it, whether educated or not. Neither negroes nor mulattoes know how to use power when given to them. They always use it capriciously and tyranically.—Tschudi, a Swiss naturalist, (see Tschudi's Travels in Peru, London, 1848,) says, "that in Lima and Peru generally, the free negroes are a plague to society. Dishonesty seems to be a part of their very nature.—Free born negroes, admitted into the houses of wealthy families, and who have received in early life, a good education, and treated with kindness and liberality do not differ from their uneducated brethren."

Tschudi is mistaken in supposing that dishonesty is too deeply rooted in the negro character to be removed. They are dishonest when in the abnormal condition without a master. They are also dishonest when in a state of subordination, called slavery, badly provided for and not properly disciplined and governed. But when properly disciplined, instructed and governed, and their animal wants provided for, it would be difficult to find a more honest, faithful and trustworthy people than they are. When made contented and happy, as they always should be, they reflect their master in their thoughts morals and religion, or at least they are desirous of being like him. They imitate him in every thing, as far as their imitative faculties, which are very strong, will carry them. They take a pride in his wealth, or in anything which distinguishes him, as if they formed a part of himself, as they really do, being under the influence of his will, and in some measure assimilated, in their spiritual nature, to him—loving him with all the warm and devoted affection which children manifest to their parents. He is sure of their love ,and friendship, although all the world may forsake him. But to create and maintain this happy relation, he must govern them with strict reference to their ethnological peculiarities. He must treat them as inferiors, not as equals, as they are not satisfied with equality, and will despise a master who attempts to raise any one or more of them to an equality whith himself; because they become jealous and suspicious that their masters's favorites will exercise a sinister influence over him against them. Impartiality of treatment in every particular, down to a hat or pair of shoes, is what they all regard as one of their dearest rights. Hence, any special favors or gifts to one, is an offence to all the rest. They also regard as a right, when punished, not to be punished in anger, but with cool deliberation. They will run from an angry or enraged master or overseer, armed with a gun or a pistol. They regard all overseers who come into the field armed with deadly weapons as cowards, and all cowards have great difficulty in governing them. It is not physical force which keeps them in subjection, but the spiritual force of the white man's will. One unarmed brave man can manage a thousand by the moral force of his will alone, much better than an hundred cowards with guns in their hands. They also require as a right when punished, to be punished with a switch or a whip, and not with stick or the fist. In this particular the ethnical law of their nature is different from all other races of men. It is exactly the reverse of that of the American Indian. The Indian will murder any man who strikes him with a switch, a cowhide or a whip twenty years afterwards, if he gets an opportunity; but readily forgives and forgets blows, however severe, inflicted on him with the fist, a cudgel or a tomahawk. A remarkable ethnological peculiarity of the prognathous race is, that any deserved punishment, inflicted on them with a switch, cowhide or whip, puts them into a good humor with themselves and the executioner of the punishment, provided he manifest satisfaction by regarding the offence as atoned for.

The negro requires government in every thing, the most minute. The Indian, on the contrary, submits to government in nothing whatever. Mr. Jefferson was the first to notice this ethnical law of the red man. [See his letter to Gilmer, June 7, 1816, vol. iv. page 279; *Jefferson's Correspondence.*] "Every man with them," (the Indians,) says Mr. Jefferson, "is perfectly free to follow his own inclinations; but if, in doing this, he violates the rights of another, he is punished by the disesteem of society or tomahawked. Their leaders conduct them by the influence of their character only; and they follow or not, as they please, him, of whose character for wisdom or war, they have the highest opinion; but of all things, they least think of subjecting themselves to the will of one man." Whereas, the black man requires government even in his meat and drink, his clothing and hours of repose. Unless under the government of one man to prescribe rules of conduct to guide him, he will eat too much meat, and not enough of bread and vegetables; he will not dress to suit the seasons, or kind of labor he is engaged in, nor retire to rest in due time to get sufficient sleep, but sit up and doze by the fire nearly all night. Nor will the women undress the children and put them regularly to bed. Nature is no law unto them. They let their children suffer and die, or unmercifully abuse them, unless the white man or woman prescribe rules in the nursery for them to go by. Whenever the white women superintend the nursery, whether the climate be cold or hot, they increase faster than any other people on the globe; but on large plantations, remote from her influence, the negro population invariably diminishes, unless the overseer take upon himself those duties in the lying-in and nursery department, which on small estates are attended to by the mistress. She often sits up at night with sick children, and administers to their wants, when their own mothers are nodding by them, and would be sound asleep if it were not for her presence. The care that white women bestow on the nursery, is one of the principal causes why three hundred thousand Africans, originally imported into the territory of the United States, have increased to four millions; while in the British West Indies the number imported exceed, by several millions, the actual population. It is also the cause, why the small proprietors of negro property in Maryland, Virginia, Kentucky and Missouri are able to supply the loss on the large Southern plantations, which are cut off from the happy influence of the presiding genius over civilization, morality and population—the white woman.

The prognathous race require government also in their religious exercises, or they degenerate into fanatical saturnalia. A discreet white man or woman should always be present to regulate their religious meetings. Here the investigation into the ethnology of the prognathous race must close, at least for the present, leaving the most interesting part, Fetechism, the indigenous religion of the African tribes, untouched. It is the key to the negro character—which is difficult to learn from mere experience. Those who are not accustomed to them have great trouble and difficulty in managing negroes; and in consequence thereof, treat them badly. If their ethnology was better and more generally understood, their value would be greatly increased and their condition, as a laboring class, would be more enviable, compared to the European peasants, than it already is.—*N. O. Med. & Surg. Journal.*

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From the North America Medico-Chirurgical Review.

## *Adaptation of the Clamp Button Sutures to Prolapse of the Vagina.*

By Horatio R. Storer, M. D., of Boston.

Case I.—Mrs. W——, a servant of Dr. Morland, was placed under my charge by that gentleman in the summer of 1856.

June 3d. Patient a widow, aged forty-two, general health tolerably good, though suffers somewhat from dyspepsia. Has for a long time noticed pain in right shoulder and left iliac region, which last has always been more or less tender on pressure. Ceased menstruating she is confident, thirteen years since, at which time, if her age as given is correct, she could have been but twenty-nine. Has seen no colored discharge since. Has had, till of late, but little leucorrhœa. Has had but one child, a son, some twenty years ago; easy labor, but rapid, especially towards its close. Has never miscarried.

Thinks her bowels are freely moved daily. Urine passed with great difficulty, but little in the twenty-four hours, though constant sense of distended bladder. Has noticed this symptom gradually increasing, till for past three months, has found it unbearable. A great sense of fullness and distention in vagina, which at its mouth is blocked by a projecting mass. This by its size and sensitiveness seriously impedes walking, and at other times often causes severe pain, particularly when rising up and sitting down. Some pain in back, and sensation of dragging in loins. Is confident she has prolapsus uteri. Has never allowed an examination by a physician.

Chest auscultated and percussed ; its organs healthy.

Upon examination, abdomen of ordinary size and fullness ; no tenderness on pressure except over left ovary, as she had stated. Vagina found completely filled by a large and fluctuating tumor, at once increased by coughing or forcing down, or by rising to the feet ; behind this the finger passed readily, uterus being perfectly in place. Vaginal gap large, perineum almost entirely effaced. Rectum, supposed by her empty, was found by the finger in vagina crammed with hardened fæces so as closely to simulate carcinoma, till firm pressure produced their characteristic œdematous feel. The free action of an enema, which was attended by vomiting and syncope, made the diagnosis more certain, and a catheter easily emptied the prolapsed and distended bladder. A little fleshy protuberance, size of a bean, behind meatus and on urethra, but external to it ; this would have seemed like an urethral pouch from dilatation, could the catheter have been made to enter it. The patient entered the Lying-in Hospital on June 8th, and was then seen by my colleagues, Drs. Read and Dupee. To the fleshy tubercle above described, which she had often inspected and been greatly troubled by in mind, I applied a ligature, on June 17th, with the assistance of Dr. Read ; it was once subsequently tightened, and came away on the 7th day. From the time of her entrance a doubly-curved catheter with a flexible tube attached was retained in the bladder, and plugs of lint soaked in a saturated solution of tannin, as advised by Dr. Fordyce Baker of New York, for prolapsed uterus, were kept in the vagina night and day. She was put on simple tonics with house diet, and rapidly improved in spirits, the displacement daily diminishing in extent. She was at all times disposed to despond, frequently had her sleep broken by incubus, and on June 12th she got a slight attack of diarrhœa, but this was easily checked.

On the 25th of June she was discharged much improved.

Re-entered the hospital on July 26th.

Has continued tonics till present time. General Health better. Has found much relief from the absence of the mass removed by ligature, but complains that the fulness at vulva, dysuria, and difficulty in walking have returned. Upon examination bladder found again down. Will not allow pessary, whether of India-rubber, pig's bladder, or aught else. Is satisfied that all other means are but palliative, and begs if any operation can give chance of relief that it may be performed.

The procedure recommended and practiced with success by Mr. Brown, of London, was, therefore, decided on, with certain modifications suggested to me a short time previously by my friend Dr. Marion Sims of New York.

July 27th. Low diet. Pill of oxgall, grs. x., to-night and to-morrow night.

July 29th. Bowels cleared by an enema in forenoon. Proceed to operate at 4 P. M. with the assistance of Dr. Read, the patient having been etherized. Strips of mucous membrane, an inch in length by half an inch in breadth, were first pared away on each side just within and parallel to the nymphæ, their edges being brought together by two linen stitches. Then beginning just posteriorly to the lower margin of these patches, the membrane was freely dissected up and removed, in shape of horse-shoe, and entirely around the posterior fourchette to the depth of nearly an inch within the vagina. This having been done, ligatures of silver wire, three in number, were introduced, secured upon perforated German-silver quills, and clamped tightly by shot.

Very little blood was lost, and the patient slept quietly through the operation.

Sims' catheter having been introduced and patient put upon her side, sol. morphiæ, gtt. xx., were administered, morphiæ sulphat., gr. ½, introduced as suppository, and a wet compress applied to the wound.

10 P. M. Comfortable.

July 30th. Slept but little last night; disturbed by restless infant in next room, and besides made effort to keep awake lest she should disturb ligatures. No pain; pulse not raised; no tenderness of abdomen. Thighs to be kept together by napkin round knees and ankles, unless patient complains. Ice to be freely given, opiates and suppository as required, and dressing continued to the wound. Thin gruel sparingly.

July 31st. Comfortable night. Complains at times of flatulence; this relieved by opiate and carminative. Urine profuse; skin cool; very little heat about pudenda; pulse quiet. In evening slight nausea.

August 1st. Complains greatly of flatulence. Abdomen hardly enlarged. Violent retching at times, with expulsive efforts to empty rectum; these not controlled by suppository. Repeat carminative, apply sinapism, and subsequently poppy fomentations to abdomen.

At 3 P. M., distress increasing, passed hollow bougie into rectum, with escape of much fetid gas, and instant relief.

At 7 P. M., complaining of general soreness of limbs; removed to softer mattress, and at 10 p. m. felt perfectly at ease.

August 2d. Slept quietly till 3.30 A. M., when had profuse watery and horribly offensive fæcal discharge, attended with escape of but little free flatus, and no pain. Complains of still further desire, so passed bougie and drew off much more fluid of similar character. Ordered chalk mixture with laudanum, catechu and charcoal, to be given as required. Wound healthy. Pulse quiet; as yet has never exceeded 84. No tenderness of abdomen; some faintness and hiccough.

At night dejections continuing, ordered brandy ʒi. every half-hour; and, alternating with a pill of two grains of tannin and one of opium, ʒi. of powdered charcoal in boiled milk; one of the two every hour and a half.

August 3d. Had ten dejections yesterday and five last night, offensive and containing blood. Very low throughout day, and allowed to see clergyman. Pulse, which had flagged for last twenty-four hours, begins to come up toward night. Now learn that four hours before operation, and contrary to strict orders that diet should be low, simple, and preparatory, which orders the matron had endeavored rigidly to enforce, patient got access to and devoured several mouthfuls of *lobster*, for which she had always insatiable longing.

August 4th. Diarrhœa still continues; five dejections yesterday and two last night, much the same in character, but beginning to show the charcoal and to lose their fœtor; still much blood, and at intervals flatus. Now allowed to pass water herself, but in recumbent posture. Slept most of night. At 8 A. M. transient flush from stimulants; pulse 130. At 10 A. M. pulse 110, skin quite cool, respiration hurried, much hiccough and sighing; gets but little sleep. Discontinue charcoal and substitute wine whey and wine with arrowroot, for brandy. Pills as before, every three hours. Slight but not unhealthy looking purulent discharge from wound; no heat; no fœtor.

August 5th. Patient feebler; diarrhœa continuing, five dejections during night. Was put last evening on sulphate of copper, half a grain every two hours, without apparent effect; therefore substitute for each dose three grains of subacetate of lead.

Has had for past forty-eight hours after every dejection, the ordinary starch and laudanum enema, instead of which now gets one containing a scruple and a half of tannin; this given every half hour if not retained.

The matron of the hospital had also been suffering for two days with dysenteric symptoms, bloody stools, tenesmus, &c., the effect of close attendance upon this patient; treated by Dr. Read.

9 P. M. From twelve to fifteen dejections during day, many of them

involuntary, their odor less fetid; some tenesmus. Injections last ordered not retained; their strength to be doubled. Some little tendency to delirium this evening, and subsultus tendinum. Pulse for last thirty-six hours about 120. Great despondency.

August 6th. Weaker. Discharges involuntary, seven last night. Injections not retained; add to each, cupri. sulph. grs. iss. All medicine by mouth to be discontinued, and beef-tea freely given.

Enema retained from 9.30 to 1.30; after this discharges returning as before. Beef-tea greatly relished, though tongue quite dry. Resume last pills at night.

August 8th. Yesterday and to-day much as before; discharges frequent, and with much blood and mucus. Pulse 106.

August 9th. No discharge from 11.30 A. M. to 4.30 P M. Disposed to sleep, and stupid; opium diminished by one-half.

August 10th. Two discharges last night, more fæcal in character. Weather the past week very adverse; wet, cold, and lowering.

August 11th. Pulse down to 100; brighter. Sutures removed to-day. Small and sharply marked slough under right quill, wound itself seeming to have nearly healed; dressed with diluted liq. sodæ chlorinat. In passing suppository yesterday, rectum carefully examined and found unaffected. No dejection from 11 yesterday morning till 10 to-night.

August 12th. Two dejections during night, in color, consistence, and odor more fæcal; none to-day. Evidently failing, though rallies at times. Discontinue all medicine and give stimulants with care.

August 13th. Very low at 7 A. M. Rallied at 9, and then nearly as for past three days. Has had no rigor since operation. At 4.30 P. M. the sphincters were relaxed, urine and fæces were profusely passed, and at 6 she died.

A woman having just been confined in next room, and there being no dead-house attached to the hospital, an autopsy was not made.

The patient was seen during her sickness by Drs. Read, Dupee, and Storer, Sen., in consultation; by Dr. Morland and by Dr. Oliver.

Case II.—Mrs. Mary C., aged thirty-five, was delivered on Dec. 5th, 1856, by a midwife, who used much violence toward the close of the labor, the pains being very slight. Child a boy, of moderate size. The patient had previously been confined but once, ten years previous, of a girl, and had never miscarried.

I saw her for the first time on Dec., 23d, eighteen days subsequent to her confinement. At that time a laceration of the perineum was found, extending completely to the sphincter ani, and a little beyond it on one side; its edges much swollen, sore, and excessively sensitive to the touch. Suppuration profuse. Much flatus passed during the examination. Urine under control. Profuse Diarrhœa. Nursing, though but little milk.

On Feb. 4th, 1857, a careful examination was again made. No restoration of the perineum had taken place, the edges of the wound were much enlarged, protruding like hemorrhoids, and the patient was complaining of great bearing down.

Objection being made by her to the necessary operation, a perineal, bandage was advised and worn for the ensuing four months, with but partial relief. By this the protrusion of the vaginal walls had so increased, both laterally and posteriorly, that the patient returned to me at the Eustis Street Dispensary, to request a radical cure. This was accordingly attempted on June 8th, with the assistance of Dr. Hayward of Roxbury.

Operation at 3 P. M., patient having been prepared by a several days' course of ox-gall. She was etherized, put on her back as for lithotomy, the dissections made as in the former case, save that those anteriorly were omitted as here unnecessary, and the silver wires were passed. Instead, however, of being fastened to metal quills their ends were passed through a leaden shield, as recommended by Bozeman, of Alabama, for vesico-vaginal fistula, and were tightly clamped upon it by shot. This shield or "button" was an inch and a half in length by a half-inch in breadth, and was oval in form. The treatment immediately subsequent to the operation was as in the former case, with the addition of confining the legs in a more immoveable position, by attaching the heels to a belt around the waist. Water dressings were alone applied.

No unpleasant symptom intervened, and on the 14th, six days after operation, the button was removed. Union firm and complete. No suppuration from beside wires. On the next day and following day, the wires were removed. On the 16th, a profuse and painful dejection, without at all disturbing the integrity of the adhesions.

June 17th. Felt so well that she has been up to-day, contrary to orders, and has used active exertion. Last night loosed the guards from her knees, and waking up in fright suddenly spread her thighs apart, causing, however, but a slight notch at the anterior edge of cicatrix.

June 22d. Parts firm and tough; union to full depth of wound; perineum of normal extent. Patient finds bearing down gone, and expresses herself to be as comfortable when on feet as before accident.

For some time subsequently, micturition continued frequent and painful, especially after over-fatigue; but this yielded in great measure to simple treatment. Oct. 10th, four months after operation, on examination for the ordinary irritable tumor of the meatus, the perineum was found still perfect. The local discomfort was gone; the patient was cured.

Case I., though fatal, furnished rather ground in favor of than against the operation performed. It was matter of no little regret to me at the time that *post-mortem* dissection seemed unjustifiable, especially as I had been strongly dissuaded from operating by a friend who had just refused the attempt to a patient of his own; but so far as could be judged by the condition of the wound, from the outset to the very end, the absence of local symptoms, the extent to which adhesion seemed to have taken place, the apparently insufficient cause from this source for the dysentery, the apparently more than sufficient cause for it from another, there seems reason to believe that had the patient obeyed orders, she would not only have lived, but been cured.

The case is published on the ground so seldom heeded, that where successful cases have been reported, the surgeon is bound to withhold no failure, especially when attended by death.

Case II., on the other hand, was successful from the outset; and this, too, though under apparently less favorable circumstances than the other. Of a naturally much more irritable, and restless temperament, nursing throughout her confinement to bed, over-anxious about the child and the success of the operation, this patient seemed much more likely to go wrong.

In neither case was that course taken—entire division of the sphincter ani—so strongly insisted on by Mr. Brown as all important to success. I believe that with the old quill suture it is an unnecessary, unscientific, and cruel application, and that with the modifications of suture here adopted it becomes unjustifiable. With Mr. Brown's other suggestions as to the nature and general treatment of both this and cystocele, typical cases of each of which have been here presented, one cannot too fully concur.

The above cases so far as they go, may serve to show the adaptability of the two new sutures, now so celebrated in connection with vesico-vaginal fistula, to the operation for lacerated perineum. The old quill suture, however used, whether with ligatures of hemp or silk, or the less irritating ones of silver or lead, secured by twisting, had always this advantage, that however closely the deeper portions of the wound were brought into contact, its upper edges would necessarily gape to a greater or less degree; an evil requiring and yet not fully overcome by the interrupted suture between the quills. The substitution in practice of Sims' clamp proved, as I had expected, to be attended with certain advantages; but these have been far excelled by the button of Bozeman, which for neatness, simplicity, completeness of action, and ease of application, I have found everything that could be desired.

Communicated for the Boston Medical and Surgical Journal.

## *Fracture of the Neck of the os Femoris.*

MESSRS. EDITORS.—In the *New England Journal of Medicine and Surgery*, No. 4, Vol. I., October, 1827, I reported a case of fracture of the cervix femoris within the capsular ligament, in which there was a perfect cure; and as an opportunity has since been obtained of an examination of the fracture, I have thought it might not be uninteresting, especially to the junior members of the profession, to republish in part the case, with the views then taken, together with the appearances on a *post-mortem* examination.

This patient was a man of feeble constitution, æt. 52, who on July 22d, fell in a saw mill, from a height of 16 feet, and struck on the left thigh and trochanter. When he was raised, the leg stood at an angle of about 40 degrees from the body, but it was immediately brought into place by an assistant. On examination a few hours after the accident, the foot and the knee were found everted, the limb was slightly shortened, but could easily be brought to its natural length, there was a sensible alteration in the position of the trochanter major, and when the patient was directed to bear on the affected limb, it gave him great pain in the region of the trochanter minor. The nature of the accident was made known, and constant extension for at least ninety days recommended. Objections were made by the patient to any appliances, more particularly on account of a pectoral affection, which rendered a recumbent position uncomfortable for any considerable length of time, and also in the hope that the accident might not be of so serious a character as represented.

The limb was placed in the most comfortable position, and directions were given the patient to remain as quiet as posible. On the 5th day it had contracted two and a half inches, and the eversion of the foot and knee was greater than on the day of the accident. By steady extension it could be brought to its natural length, but when this was romoved it would readily contract again with a slight jerk, and an increase of pain; this was greatly aggravated by rotation inward. There was but little swelling or external inflammation about the joint.

Sir Astley Cooper's views and treatment in cases of this character were examined, and made known to the patient, together with the reasons why they should not be adopted as a rule of practice. Mechanical appliances were instituted, and for seventy days constant extension as the circumstances indicated; after which, permission was given to sit up more or less, and move the limb with the greatest care without bearing any weight on it. In about four weeks after the limb was taken out of the apparatus, he began to walk with a cane, and shortly after recovered entirely, without any shortening or apparent eversion of the foot or knee.

For a description of the apparatus and its mode of application, reference is made to the full report of the case.

This patient died of phthisis pulmonalis nine years after the accident; and upon examination, the neck of the os femoris was found to have been fractured transversely near the head, and firmly united with ossific union, somewhat shortened and enlarged. A small spiculum of bone, about half an inch long, and one-fourth wide,. lying near the cervix, seemed to grow out from that portion of the edge of the fracture belonging to the shaft. No considerations could induce friends to let me have this specimen for the benefit of science.

Whether this is the first well-attested case in this country of a perfect cure of fracture of the neck of the femur within the capsular ligament, I am not able to say; but it is believed that no one questioned the soundness of Sir Astley Cooper's views upon this subject until this case was reported. This eminent surgeon objected to making mechanical appliances in fracture of the neck of the os femoris within the capsular ligament—1st, on account of the difficulty of keeping up constant extension; 2d, of making lateral compression; 3d, that bony union never took place when the fracture was within the capsular ligament. In answer to these views, it was considerd that constant extension could be maintained, and had been, in the case above reported, and that lateral compression could be carried to any extent which the nature of the case required. Sir Astley's third objection, that bony union could not take place when the fracture was within the capsular ligament, because "the neck and head of the bone are supplied with blood from the periosteum of the cervix, and the reflected membrane which covers it, and that when the bone is fractured, if the periosteum be torn through, and the reflected membrane broken, to which there can be but very rare exceptions, all the means of ossific action are, in consequence of such fracture and laceration, necessarily destroyed in the head of the bone," required a more full consideration.

It was contended that the whole cavity of the joint was surrounded with the synovial membrane, which was reflected over the neck and head of the bone; that the bone is kept in place by strong ligaments; that the periosteum does not cover the head of the bone, or that portion within the capsular ligament; that the vessels which enter into the synovial membrane, and to form the round ligament, and nourish the head of the bone, are reflected from the acetabulum over the round ligament to the head of the bone, as well as from the neck, and that they inosculate with each other. In fracture of the cervix femoris, the reflected membrane may be broken, but the means of ossific action are not destroyed, as the head of the bone is nourished from vessels that pass from the acetabulum over the ligamentum teres, which keeps up its vitality. The same process which forms the bones in the fœtus, and promotes their growth and hardness, is carried on to unite them when fractured. This is retarded or facilitated according to circumstances. The situation of the fracture may render it slow, or old age and an impaired constitution may entirely suspend it, in parts endowed with a low degree of sensibility and vital action; but in a good constitution, when the broken extremities are reduced and kept in contact a sufficient length of time, ossific union will usually take place.

If parts destitute of periosteum cannot be united with bony union, as is contended, we are led to inquire by what action the extremities of several of the bones are formed, as of the femur, the olecranon process of the ulna, and the capsular extremity of the clavicle. Does not the same action produce the extremities of the bones that forms the other parts, differing only in degree, thereby requiring a longer time for the deposition of bony matter? And will it not as certainly unite them when they are fractured? If parts separated from the system, as the nose, ears and fingers, can be united, and do well; if the spur of the cock can be transplanted into the comb and thrive—can there be any inconsistency in believing that in fracture of the cervix femoris there remains sufficient vitality and natural action to repair the injury.

It was also observed that the experiments of Sir Astley Cooper were not conclusive, nor to be relied upon, because they were made upon animals, and could not be treated upon the correct principles of surgery; that it was impossible to produce a transverse fracture of the cervix femoris in an animal, and treat it so as to admit of ossific union, and therefore all such experiments were only calculated to mislead, and should not be relied upon in establishing principles of practice. From the anatomy and physiology of the hip-joint in the human subject, we have good reason to believe that ossific union would take place in fracture of the neck of the bone, when treated according to the nature of the accident and condition of the parts affected.

Since the above case was reported, many fine specimens of union of the neck of the femur have been collected, and the principle seems to be well established that ossific union may be expected in fracture of the neck of the femur within the capsular ligament, when all the indications are met.

It might be well to enquire why so few cases of this character are cured, and so many abandoned to die, or become cripples for life. Most fractures of the neck of the femur are in old people, or those with an impaired constitution, who are considered unable to bear the long confinement necessary to insure ossific union, and who would be better treated with reference to making them as comfortable as possible; but it is believed that many are left, who by judicious treatment might receive permanent cures. With our present improved appliances, every indication can be answered, and the long confinement necessary to a cure made quite easy.

In fractures in parts with a low degree of sensibility, or where ossific action does not readily take place, the treatment should be the more carefully attended to.

The sooner after the accident the bones are placed in opposition and maintained there, the greater probability of avoiding that inflammation in the cavity of the joint which produces a superabundance of synovia, which so often prevents the deposition of ossific matter.

It is highly probable that in every case, however favorable, there is an increased secretion of synovial fluid; but if lateral compression be perfectly maintained, so as to keep the fractured extremities in contact, absorption will take place, and bony matter be deposited in due time. In treating fractures of the neck of the femur within the cavity of the joint, sufficient attention is not paid to lateral compression. The limb may be brought down to its natural length in transverse fractures, and yet the ends of the bones may not coaptate; and, furthermore, if lateral compression is not sufficient to hold the broken extremities so firmly together that the acetabulum will roll on the head of the bone when the body is raised, leaving the fractured extremities perfectly at rest, then the head of the bone will be carried forward with the acetabulum, and break up all union that may have commenced.

As the broken surfaces are rough, they may be brought into perfect opposition and maintained, so that all necessary movements of the body may be made without endangering displacement. Whenever the body is to be moved in the least, the lateral compression should be correspondingly increased. Our appliances must be so perfectly arranged that every indication in the case may be fully answered, or we shall have no hope of effecting bony union.

In addition to mechanical appliances, and attention to the comfort of the patient, the general system should be carefully attended to. Some patients will require depletion and the antiphlogistic regimen; while others must be treated with tonics, stimulants and a generous diet.

If perfect extension be kept up for a few weeks, the contraction of the muscles will be so much overcome that the patient will suffer but little from it; but lateral compression should not be omitted at any time until permanent union has taken place. The least motion in the fractured extremities may break up provisional callus, and entirely destroy the recuperative power in the parts. Whenever lateral compression is abandoned, if union has not taken place, the inclination of the limb to rotation outward will most assuredly displace the bones, so as to prevent ossific union. We have seen cases which seemed to be of this character.

The difference between treating a case of fracture of the neck of the femur, and common fracture, is very great. While in the one case union readily takes place, and sometimes without surgical aid, in the other it is effected only by the most careful treatment.

Before undertaking to manage a case of this description, the surgeon should well consider whether he has skill, and appliances to fully meet every indication, or he should attempt nothing. It is better to "own up at once," than to fail for the want of those means without which we cannot expect success.

P. SPALDING, M. D.

*Haverhill, N. H., Feb. 4th,* 1858.

## *Extracts From the Records of The Boston Society for Medical Improvement.* By F. E. OLIVER, M. D., *Secretary.*

*Tubular Pregnancy.*—In reference to the case mentioned in the last report of the Society, by Dr. HOOKER, Dr. H. stated that he was guided in his diagnosis by the case of tubular pregnancy reported in April by Dr. JACKSON, and which occurred under the care of Dr. Brooks, of the State Alms-House at Monson—(See *Journal*, Vol. LVI., p. 378).

It will be seen in the cases subsequently referred to by Dr. Jackson, and following that report, that this is the second instance in which the practitioner was materially aided in arriving at a correct diagnosis, by the previous report of a similar case; a fact illustrative, as Dr. Jackson remarks, of the practical importance and benefit to the profession, of medical associations.

DEC. 14th.—*Bronzed Skin; Atrophy of the Supra-renal Capsules.*—Dr. HODGES said that a subject had been received for the dissecting-room, from one of the public institutions, which presented a very striking discoloration of the skin, at once suggesting the melasma Addisonii.—The fore arms and the genitals were the most strongly marked. The spots were irregular but distinct in outline, reminding one of the changes sometimes observed in the negro. The skin of the face, legs and abdomen was also discolored, but in a less degree. The surface of the skin was natural, not having a scaly or furfuraceous appearance. There was an old reducible hernia on the right side.

On examination, no disease was found, to account for his death.—The kidneys were healthy; the capsules of half their normal size, the right weighing 36, and the left 44, grains. Their appearance was certainly not that usually noticed in dissecting-room subjects; although it cannot be said that they were diseased.

With regard to the previous history of the person, Dr. H. stated that he was from the country, and aged about 75. He was registered in the books of the institution as "insane." He was never admitted to the Hospital, as he complained of nothing but debility; but was put into the " old man's" ward, so called, and allowed to lie in bed when so inclined. He died, suddenly, at the end of one week after his admission to the institution.

Dr. H. remarked that debility and cerebral disturbance were the two most marked symptoms of bronze disease, and regretted that the symptoms of death in this case were not recorded.

DEC. 28th.—*Bronzed Skin; the Supra-renal Capsules apparently* *normal.*—Dr. HODGES showed the skin of the scrotum, the supra-renal capsules, and portions of the peritoneum, from a dissecting-room subject. The case was one of discoloration of the skin, similar to that above reported by Dr. H. The discoloration was not so marked as in the previous instance, except of the skin about the genitals, where it was very striking. About the face, arms and neck, it was also sufficiently marked to at once attract attention.

The subject was considered an old man at the institution from which he came, but, with the exception of gray hair and baldness, there were none of the characteristics usually noticed in old subjects. The teeth were sound; the muscles remarkably well developed and free from fat; the skin was unwrinkled, and the subject was considered a remarkably good one. Death was said to have resulted from "old age and general debility;" there being no evidence of any disease.

On examination, the viscera were found sufficiently natural, and the supra-renal capsules healthy. The discoloration of the serous surfaces figured by Addison, were well shown upon the peritoneum; the mesentery, appendices epiploicæ of the sigmoid flexure, and some parts of the peritoneum covering the anterior wall of the abdomen, being well sprinkled with black specks not unlike "fly-blows"

JAN. 11th, 1858.—*Cancer of the Breast, from a nursing Woman.*—Dr. J. M. WARREN showed the specimen, which displayed the ducts filled with milk.

Dr. W. said that the patient labored under an accumulation of misfortunes seldom falling to the lot of one person. She had been confined to her bed for a fortnight, from the excessive pain and constitutional disturbance of the cancer. She was in a starving condition. She was nursing one child, and six months gone with another. Her husband was in a consumption; and the day after she entered the Hospital her eldest son was brought in with a fractured leg. The operation was, in a great measure, a palliative one, and thus far had afforded her entire relief. Some facts of this woman's history are interesting, and, at his request, Mr. Stickney, the surgical house pupil, had put them together.

Catherine McKenly, aged 43; is of large frame, and says she was strong and robust, and never had a sick day until the present time.—Had been in America 23 years. Came over from Ireland when 19 years old, and during her nineteenth year menstruated for the first time, the periods recurring regularly up to her first pregnancy. Was married four years after her arrival in this country, at the age of 23, and, in eleven months after, gave birth to twins. Had been married nineteen years in June next; had borne fifteen children, and is now six months advanced in pregnancy with her sixteenth.

The first pair of twins she nursed two and a half years, and, in about a week after, gave birth to another pair. These she nursed at once, and continued to do so for about the same length of time (two and a half years). Three of these children are now dead. The fourth, who was the most weakly, and of the first pair, is still alive, and now in Ward 28, on account of a fracture of the left leg.

She does not remember that she has ever, at any time, had her breasts entirely free from milk, since the first birth; and at this moment she has a small quantity in the left breast—having weaned her babe but two days before she entered the Hospital. Says she has invariably nursed each child till the birth of its successor. Does not recollect having menstruated but two or three times, in all, since being married.

Eleven children have died, and the four who are living are not very robust, probably from surrounding circumstances. Three died from hydrocephalus; one, from scalding with water; one from measles. The cause of death of the other six, she cannot state.

During all this time, she has obtained a living by days' work from home; frequently paying another woman twenty-five cents to care for her child till her return at night.

## *Extracts from the Records of the Suffolk District Medical Society.*

*Charles D. Homans, M. D., Secretary.*

[*Imperforate Rectum.**—A male child, 3 days old, had passed nothing from its bowels since its birth. Its abdomen was distended, the skin was yellow, and there was some vomiting.

The anus was normal; the little finger could be introduced to the distance of about three-fourths of an inch, when it encountered an obstacle which prevented its further passage.

*Operation.*—An exploring needle was passed in by Dr. H G. Clark, the consulting surgeon, to the distance of an inch above the termin tion of the cul de sac. This was followed by the discharge of gas through the canula. The opening was immediately dilated by bougies of different sizes up to that of a common catheter, and meconium was freely discharged. The dilatation was followed up by Dr. Moore, and the child was well in one week.]

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* This case of Dr. Moore having been inaccurately reported on page 510, of our last volume, is her reprinted in a corrected form.

JUNE 27th, 1857.—Dr. BUCK reported two cases of *Erysipelas following Vaccination.* They were novel to him, and might be interesting to the Society.

In March last, he vaccinated a child a few weeks old, and at the end of a week a good vesicle had formed; there was no areola. He charged some quills, and supposed that everything would go on according to the rule. The third day after this, the child was attacked with erysipelas about the pustule, which soon involved the whole arm, and extended to the chest, running its course very rapidly. Death ensued, on the eighth day from the time when the disease was first seen. He vaccinated several children with matter taken from this child, and they all did well.

On the 4th of the present month, he vaccinated a healthy child, also a few weeks old, and on the seventh day charged his quills. Nine days after this, the sixteenth day after the vaccination, erysipelas appeared on the arm, ran down the chest, abdomen and the legs; this patient is now recovering. He also vaccinated several children with lymph taken from this case, and no trouble had as yet ensued.

There was no case of erysipelas in the houses where either of these children were living, and no predisposition to this disease, as far as he knew, in either of the families to which they belonged. These are the only cases of the kind Dr. Buck has ever met with.

Dr. HODGES referred to the report of two cases of *Hydrocele treated by the red oxide of mercury,* printed in the Extracts from the Records of this Society, in the last number of the Medical Journal. This mode of treatment was first recommended by Mr. Lake, of London. Since those two cases were reported, Dr. Hodges had had occasion to try this method. After the fluid had been withdrawn, about five grains of the red oxide were pushed through the canula by means of a probe. The inflammation which followed was not greater than that generally produced by the injection of iodine, but salivation ensued on the fifth or sixth day. The hydrocele was cured. This accident had not been mentioned in the reports of any of the case which Dr. Hodges had seen. The red oxide of mercury was formerly a favorite application to ulcers, and was not generally followed by salivation.

Dr. BUCK stated that, thirty years since, he had been in the habit of frequently using this preparation of mercury as an application to ulcers, but he had never seen salivation as a result of it.

Dr. Hodges thought the large absorbing surface of the tunica vaginalis a sufficient explanation of its occurrence in the case on which he had operated. He considered it an important fact to remember, as it had not been mentioned, so far as he knew, as an accident likely to occur.

Dr. Buck asked what advantage there was in the use of this drug over the tincture of iodine.

Dr. Hodges considered its greater convenience its only recommendation. A surgeon could carry it about with him much more easily than a bottle of the tincture of iodine and a syringe. He thought, however, that he should not try it again himself.

Dr. M. C. **Greene** reported a case of *fungous growth from the navel.* The cord had sloughed off from an infant a week after birth, leaving a point of ulceration about the size of a pin's head. This immediately began to increase, and Dr. Greene was called in ten days after its first appearance.—It was then about six lines in diameter, and eight in height. Astringents and caustics seemed to have no effect upon it. A ligature was applied, and in two days all was well. There was occasionally hæmorrhage. He had never seen a case of the kind before.

Dr. C. G. **Page** had meet with an instance of the same affection, which, after a similar treatment, was followed by recovery· In this case, also, caustic and astringent applications seemed to be of no benefit.

*Blighted Ovum.*—Dr. A. B. **Hall** reported the case and exhibited the specimen. The patient from whom it came away considered herself as in the fourth month of pregnancy. She had been confined eighteen months previously. Saturday evening, she was taken in labor, and a hydatid cyst was soon thrown off, which would countain perhaps two ounces of fluid. On Sunday morning, six hours later, the mass on the table was thrown off, and the labor was finished. The specimen was about the size of a cocoanut, consisting apparently of the fœtal membranes. It was an empty sac, the walls at one bar being much thickened; their structure at that place resembling that of the placenta. A rupture existed nearly opposite this portion, through which Dr. Hall supposed the hydatid had passed.—*Boston. Med. & Sur. Journal.*

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## *Puerperal Convulsions from Gastric Irritation.* By J. LEVERGOOD, M. D., Wrightsville, Pa.

Notwithstanding gastric irritation is conceded to be a not infrequent cause of eclampsia, the subjoined history of a case of this sort, which occurred in my practice, may possibly present some features of sufficient practical importance to render it worthy of publication.

October 31st, 1853, I was requested, about five o'clock, P. M., to call to see Mrs. V., and knowing her to be near the end of her pregnancy, I visited her as speedily as possible, supposing she had been taken in labor. Upon my arrival I found her walking up and down the room complaining greatly of a pain in the pit of the stomach, but in other respects enjoying her usual good health. The seat of the pain from which she was suffering, its continuous and unintermitting character, in connection with the undilated condition of the os uteri, led me to conclude that she was not in the incipient stage of parturition. After repeatedly interrogating her, I at length ascertained that she had eaten a piece of *raw turnip;* but the portion she had swallowed was so very small, as in her opinion, not to deserve mentioning, in fact not exceeding, as she expressed it, *a bite.* Although an emetic seemed clearly indicated, I felt averse to administering it, apprehensive that by its powerful excito-motory action premature labor might be broght about, and partly, also, because the patient herself was strongly opposed, under the circumstances, to the use of such a remedy. I therefore ordered a large dose of castor oil, with forty drops of elixir of opium, with instructions to repeat the elixir in an hour, provided there was no mitigation of the pain. At eleven o'clock I was sent for in great haste, the messenger informing me that the patient had been suddenly attacked with convulsions. Finding her upon my arrival with a livid countenance, distorted features, frothing at the mouth, agitation of the body, and coma, I at once opened a vein in the arm, and abstracted a large amount of blood. An examination per vaginum also revealed the first stage of labor nearly completed, the vertex presenting. With the concurrence of Dr. Barton Evans, of whose valuable assistance I had the benefit, I determined to let the labor take its natural course, upon the ground that "a meddlesome midwifery is bad," and "that more women die when they are officiously delivered by force' than when they are committed to their own resources." The result verified the wisdom of the course we adopted, for shortly afterward, and synchronously with a powerful spasm, the uterus contracted and expelled a still-born male child. The convulsions continued for two days, and a slow recovery then took place, a most rigid antiphlogistic treatment having been employed.

That the piece of turnip was the exciting cause of the convulsions seems very evident from the fact that, in seven previous labors, and three subsequent to the above-mentioned attack, no untoward symptom occurred. That matters of an indigestible nature, taken into the stomach of a parturient female af a nervous temperament, will cause eclampsia, is an established fact in obstetric medicine, but the *cur et quere* have never been satisfactorily explained.—*N. A. Medico-Chirurgical Review.*

## *The Pathology and Treatment of Hemorrhage from Mucous Snrfaces.*

By E. Read, M. D., Terre Haute, Indiana.

No tissue in the human organization is so incident to, or is so frequently the source of hemorrhage as the mucous. Hence we have as common maladies, epistaxis, hemoptysis, hematemesis, hematuria, hemorrhoids, menorrhagia, &c. No part of this tissue exempts it from this common hemorrhagic law. Some portions, however, are not only more liable to it in frequency, but in danger.

Hemorrhages are at all times alarming, both to patients and friends, and are, not unfrequently, the most formidable ailments, which fall to the charge of the physician.

I propose in this paper to examine the pathology and treatment of mucous hemorrhages. I have stated above, that these surfaces are exceedingly liable to hemorrhages, and among the most prominent reasons for this frequency, may be cited the liberal supply of blood to this surface, and the great excess of veins over the arteries, the disparity here being much greater than elsewhere. When in a state of health, however, the venous blood courses these mucous channels safely and faithfully, and only fails to do so, when antecedent or co-existing obstructions prevail, inducing a *termination* in hemorrhage from capillary distension. When the circulatory system is equally balanced, when no obstructions exist, when the conveying and conveyed parts are in a healthy state, hemorrhages are not to be anticipated, but when the reverse obtains, blood may be poured out, giving the different varieties of hemorrhage before mentioned.

In all these cases, the blood is venous, and where it is altered from previous disease, or from debilitated habit, its flow is more profuse, and its arrest more difficult, because in such habits the congestion is more intense, which forces a greater capillary distension, and an easier rupture, and a more ready exosmosis.

In such cases the fibrin of the blood is diminished, its coagulability is lessened, and the venous coats have shared the general debility, which facilitates their rupture; hence expistaxis not unfrequently becomes dangerous in habits, with enlarged spleens and loins, and those suffering from general malarious prostration.

I lay down then the general proposition, that these hemorrhages are the result of congestion, and that the basis of the treatment is to be found in anti-congestive remedies, and while I shall maintain this proposition as a whole, I shall speak of other causes, which have and ought to be recognized as inducing hemorrhage from the mucous membranes.

These hemorrhages may result from general plethera—such is epistaxis, especially when it takes place in the young and robust, and apoplexy, when it is found in those of full habit.

They may result from the intropulsive operation of cold. But last year I was called to treat in a single very cold winter's day, two persons, but a little beyond the middle of life, who had apoplectic strokes, one of whom died, never having spoken after he fell.

In this case, blood was evidently poured upon the brain from the rupture of a blood vessel, the result of intropulsion of blood from cold.—From the same cause, epitaxis may also take place.

Hemorrhage of these surfaces, may likewise result from irritants. Hematemesis may follow the introduction of irritants into the stomach, and hematuria arise from stimulating diuretics and hemoptysis from the inhalation of irritants upon the lungs.

Atony of the blood vessels may also cause hemorrhage by congestion, and in this state, it takes place in the dependent parts. The erect posture may bring on fatal uterine hemorrhage in debilitated subjects with this diathesis, and a stooping posture may induce apoplexy.

A general or local hyperemia usually precedes hemorrhage—that is, blood is determined to a part in an active and uninterrupted manner, which may give rise to active hemorrhage, or there may be excess of blood in the vessels of a part, with a diminished motion of that blood, and this forms what is called passive hemorrhage.

I exclude from present consideration all hemorrhages resulting from mechanical injury, which frequently may arise from blows and strains.

It is scarcely reasonable to suppose, that hemorrhage depends altogether upon hyperemia; but that, in most cases, there is in addition an altered or diseased condition of the contained and containing parts, that is, of the vessels themselves, and of the blood circulating in them. I can not doubt, but that in many instances, both are diseased or altered, but in most cases, that the vessels themselves are only weakened from a preëxisting general disease, while the great change exists in the blood itself. It is more fluid—less coagulable—is defective in fibrine, and is just in that condition, that the smallest cut or breach of texture, admits of the most troublesome oozing of blood. This may be termed the hemorrhagic diathesis, and is recognized by a pallid or sallow hue of the skin, and a paleness of parts naturally covered with blood.

In many diseases, the blood is not only deficient in coloring matter, but the coloring matter is changed, as is known to be the case in malignant fevers. Such was observed in the Walcheren fever, where the blood was said to have changed to a pitchy black. In cachexia, from malarious influence, and disease of the spleen, the blood is poor and perverted.

Petechiæ and ecchymosed patches in malignant and low forms of fever, are probably owing to a change in the coloring matter in the blood, and to a breaking up of the red particles. The various shades and unhealthy hues observed among the poor and ill fed, and the cadaverous cachectic sallowness of those residing in malarious regions, may be ascribed to a change in the coloring matter of the blood.

The changed condition of the blood and of the blood vessels are coexisting. Firmness and elasticity and density can not exist in the vessels, when the blood is thin and poor, and wanting in every healthy element to render them so. If it were possible to have them in a perfectly healthy state, the thin and watery blood might be carried along without transudation. A French physiologist observed from experiments which he made, that animals from whose blood fibrin had been abstracted, were easily effected with congestions and effusions upon different organs, and this may be ascribed to what another Erench philosopher regarded a general physical fact: that very thin fluids pass with greater difficulty through capillary tubes, than those of greater spissitude.

It would seem to be reasonable, that a fluid with cohesive properties would be driven with greater facility through the hydraulic apparatus of the circulation, than that which is thinner, and that the latter condition may be more favorable to irregularities in the distribution of the blood. It is thus that we may have the most intense cerebral pain from great loss of blood. It is thus that the pale and anemic female suffers so much from headache, which can alone be relieved by tonics and generous diet. Hence follows the proposition, that the weak and debilitated, the poor and ill-fed and clad, the old and the infirm, and in fact, all whose blood runs white instead of red, are the fittest and most frequent subjects of congestions. Is of them, that the cholera is every where fed, in all the great marts and thoroughfares, wherever it has passed. It is of them, that intermittents are made up, where congestion alternates in every organ in the human system. It is of them that uterine congestions and hemorrhages are made up.

It is of them, the old, the infirm, the debilitated and cachectic, whose blood is deficient in every healthy element, in red particles, in fibrin and albumen, that are drawn the subjects of pneumonia and pulmonic congestion.

It is of them that mucous hemorrhages come, supervening congestions, and forming what is usually denominated passive hemorrhages.

Now most hemorrhages are of this class. Active hemorrhage, as stated heretofore, may and does sometime exist, but rare however, compared with the passive.

When the whole system in all its various parts and functions, is in a state of health,—when the blood vessels are firm—when the blood is rich in all its essentials, when it is as new wine in new bottles, there is but little danger of hemorrhage of an alarming character, except in the rupture of a brain vessel, when a small quantity would cause death. In such habits, congestion rarely takes place, and consequently hemorrhages rarely.

But in the cachetic—in the pale and sallow and debilitated—in those who bear upon their external the impress of decay, how liable are they to congestions! And when the blood is arrested at any point, and there accumulates, and there is not vitality euough to propel it along, the thin blood oozes through the relaxed blood vessels, and we have a hemorrhage difficult to check. The blood vessels of the skin itself may give way, but the more delicate ones of the mucous surface, are those from which the great danger is to be apprehended. How often do we see the delicate female succumb to uterine hemorrhage? How often do most vexatious hemorrhages gush forth from the schneiderian membrane? How often do the gums become spongy, relaxed, and hemorrhagic? How often does the extraction of a tooth endanger the life of those of this tendency, and how often do we encounter purpura hemorrhagica?

I have said these hemorrhages, epistaxis, hematemesis, hemoptysis, hematuria, menorrhagia, and albuminaria, may arise in full plethoric and healthy subjects, and may be active, but by far the greatest number are passive, and the subjects of these are feeble, pale, and dissolving.

Wherein the transit of blood is interrupted in its circuit in any organ, the effect of that arrest may be expended in a remote part; for instance, splenic congestion gives rise to epistaxis—hepatic congestion to hemorrhoids and dysentery.

In all malarious districts, these hemorrhages are common for the reason that congestions are so, and they are concomitants of congestion. Do they arise from inflammation?

I have no hesitation in declaring my belief that inflammation of the mucous surfaces does not terminate in hemorrhage. I have no hesitation in the declaration, that none of the above hemorrhages, as a rule, result from inflammation.

Can it be anywhere shown, that antiphlogistic remedies are applicable to these cases? Can it anywhere be shown from good authority, that these surfaces pour out blood from inflammation, either during its existence or termination, and yet we are told that antiphlogistics are the remedies to be used.

In those parts of the mucous tissues exposed to visual inspection, did any medical gentleman ever see inflammation terminate by the pouring out of blood? We cite the mouth, fauces, nose, eyes, and vagina, as examples.

I wish especially to impress the proposition, that such results are never anticipated and never found; but that these hemorrhages are the result of congestion, which congestion mostly takes place in weak and debilitated subjects, with impoverished blood. I hope those who may do me the favor to read these pages, will reflect upon this matter carefully, and if it can be done, will point out the written authority or the personal experience, proving that inflammation of mucous surfaces does terminate in the effusion or transudation of blood.

I particularly invite investigation upon this point, because if the general law of the termination of inflammation of these surfaces does not sanction such effusion or transudation, I shall then have established additional evidence of the non-inflammatory condition of dysentery, the pathology of which I have endeavored to study carefully and without prejudice. And here let me disclaim all partiality or fondness, for any doctrine, however ancient and long received, or however new and fascinating, which will not bear the test of experience and of careful examination. I have been taught from the saddest experience, the necessity of a change of practice in many diseases, and especially those which have hitherto been regarded inflammatory—the treatment of which, under that view, was insufficient and unsatisfactory; but which have been controlable under remedies applicable to congestion.

Of these may be mentioned dysentery, pneumonia, and hemoptysis. In addition to what has already been said upon this subject, I may state that hemorrhages prevail mostly in those seasons when malaria is most rife, and in these countries where we have most agues.

I have particularly observed this of epistaxis and hematemesis. Every year, towards the close of summer and in the fall, I see a great deal of epistaxis, and what has been particuly a matter of observation with me, is, that the very first frost of fall, largely increases it both in numbers and in formidableness. It mostly occurs too at night, and am sure of being deprived of my rest on that, if on no other night.

In 1845, more persons suffered from congestions in this region than before or since, and during that summer, I saw not less than twenty persons, who, upon the invasion of a chill were seszed with hematemesis, and who vomited large and alarming quantities of blood. One and two quarts were usual measures.

During this, the surface was cold, chilly, and death-like, and the thirst intense and unquenchable. In these cases, the invasion was sudden; the blood was poured out into the stomach from ruptured mucous capillary vessels, the result of a chill of congestion. In no way could it arise from inflammation.

In all such, I carefully withheld cold drinks, and gave in their stead hot gruel in table-spoonful doses every few minutes, in conjunction with hot whisky or brandy toddy, and applied mustard cataplasms over the epigastric region, and hot applications to the extremities and surface generally.

In addition, I gave x grs. quinine immediately, and v grs. every hour afterwards until reaction was restored, and the pulse became full and the surface hot. Undar the free use of tonics and stimulants, the bleeding was readily checked, and its return prevented. I have impressed upon my mind one case which I saw accidently. I had visited the family in the morning, two or three were sick. As I was near by in the evening, it occurred to me that I had better call, and see if all was well with my patients. In addition to those already sick, I found a stout young man had two hours previously been seized with hematemesis, and as I myself and other physicians were all absent, he had not been prescribed for He suffered no pain—said he felt quite well, except weak, but was intensely thirsty—cold drink was all his desire. He was pulseless, very cold, with a cadaverous odor, and seemed in a collapsed and moribund state. I gave him 15 grains quinine immediately in hot brandy, suspended his cold drinks, had hot gruel provided, immersed his hands and feet in water as hot as could be borne, and remained with him until reaction was restored. He recovered.

About the same time, I was called to visit a stout laborer, 32 years of age, who was bleeding profusely from his bowels. An hour previously he had been seized with a chill, and immediately the hemorrhage supervened. He was cold and pulseless, and the blood poured from him when lying in the most quiet manner. I had never before, nor have I ever since, seen a case so alarming and apparently so desperate. Immediately I gave him x grs. quinine in conjunction with hot brandy toddy, and applied external warmth and mustard cataplasms over the bowels. In an hour's time, reaction was restored, the bleeding ceased, and under the free use of tonics and stimulants he recovered. He was intensely thirsty, and was not satisfied with any but the coldest drinks. As reaction took place, the hemorrhage ceased, and there was not a recurrence of either chill or bleeding. In this case and in all others, where the invading chill is severe, or where it is complicated with untoward symptoms, tonics must be administered promptly and boldly.

A timid and undecided treatment will surely result in death. In the case just cited, what other treatment could have offered the smallest hope of relief and restoration to health?

No one opinion in medicine was ever so absurd, or has been productive of so great a loss of life, as that which inculcated the doctrine, that the tongue must be made clean by alteratives and cathartics, before tonics could be safely used. In most eases, where malaria is abundant, and where other combinations render the system peculiarly liable to its impression, death would supervene before the time would arrive to use tonics under that belief. Not only this, tonics will clean the tongue much sooner and better than any or all other remedies combined. From a long experience in intensely malarious regions, I am pursuaded that in most cases tonics may be used at once and freely without any preparation whatever.

By a prompt tonic treatment, the disease may be cut short and organic lesions prevented.

TREATMENT OF MUCOUS HEMORRHAGES.—It is obvious from what I have heretofore said, that I regard most mucous hemorrhages to be of a congestive character—hence I discard in their treatmeut, blood-letting, nauseants, and astringents.

Epistaxis is a very usual concomitant of ague, and is sometimes very troublesome. Formerly I was in the habit of using cold applications freely, and have seen the blood pour out without remission and to a dangerous extent, when my patient was already pale and almost pulseless, and was cold and chilly. I have used styptics and have plugged the nares anteriorly and posteriorly, and still the blood ran. It was devoid of coagulability—it had no fibrin. I have used nauseants, and still it was not checked. In the treatment of this kind of hemorrhage, the only rational and safe practice is, to remove the congestion and to equalize the circulation. This is to be accomplished by a liberal use of tonics and stimulants, and the application of external warmth. In no instance have I failed to arrest the hemorrhage promptly, when I have given from five ten grains quinine, and repeated as required, together with stimulants and the application of external warmth. Cold and astringents and styptics, and nauseants are absolutely hurtful. This treatment applies to every mucous hemorrhage, as well to epistaxis as to any other.

Several years ago, a thin, spare bachelor quaker, named John Hare, kept a hotel near the old Court House in Cincinnati. He was very subject to hemoptysis, and having an office convenient, I was frequently called to prescribe for him, when he was bleeding, which happened mostly at night. Faithful to the doctrines which I had been taught, I invariably bled him copiously from his arm, and depleted him otherwise, *pro re rata*, and in the most approved manner. In spite of my treatment, my quaker patient lived, and for aught I know may still live. My practice had no arresting power. Periodically he bled.

I trust I have become wiser in the treatment of hemoptysis, and that I prescribe more in accordance with its true pathology. During the hemorrhage, I apply a large and warm mustard cataplasm to the chest, administer quinine and stimulants freely, and apply warmth to the extremities. During the interval, quinine, bark, and stimulants, either brandy or whisky, and a general tonic course is to be pursued. In other words, the whole system is to be invigorated. With this treatment, I am persuaded I have saved very many, who would under any other, have gone down to the grave surely and speedily. Six years ago, Dr. Young, my partner, a young man, without any premonition except a fullness of the lungs, was seized with a violent and alarming hemoptysis.

Within a few weeks it occurred twice, but under the liberal use of tonics and whisky, he entirely recovered.

For two years, however, he used quinine almost daily, and whenever he felt a pulmonic fullness with an irritating cough, he could check it at once with a few grains of quinine. He has entirely recovered, and is robust and healthy. I could record many other similar cases.

In every species of mucous hemorrhage, our main reliance should be upon the liberal use of tonics and stimlants, in connection with a generous diet. The system should be invigorated--irregular distributions of the blood prevented—and local hyperemia discussed.

No one of these hemorrhages requires a more liberal use of these remedies, than does menorrhagia. Its victims are the pale and feeble and bloodless, and the doctrine which teaches the use of other remedies, should at the same time teach a language to console the sorrowing hearts of those, who are called to mourn departed friends.

I have already written, I hope, at sufficient length, to attract the attention of the profession to the subject I have discussed. In all alarming hemorrhages, the physician must be fortified with suitable remedies, and with the proper reason for their use. In such cases, there is usually too much confusion for quiet thought.

I am persuaded that no class of diseases, have generally been so badly treated as these. Depletion has been used when tonics were the only proper remedies, the blood has been made thinner and poorer, when it should have been made thicker and richer.—*Cin. Lancet & Observer.*

# EDITORIAL AND MISCELLANEOUS.

## Atlanta Medical College.

As at this season, the prospect for a class in this Institution is a matter of interest to many who receive this Journal, we would state that—notwithstanding the recent wide-spread financial embarrassment, from which indeed the country has not entirely recovered—there is scarcely a doubt that there will be a decided increase in the number of students at the next session. Although industrious efforts have been made in some quarters, since the last session, to discredit the Institution on account of the period of the year selected for the lectures, we can confidently state that the College has acquired more reputation and influence in its behalf in the last six months, than in any previous *year*.

We shall not be restrained by false delicacy, from stating that the medical men of the country have not allowed themselves to be deceived by the disingenuous effort which has been made to produce the impression, that to graduate a student in the *summer*, was necessarily to shorten the period of his study.

The effort upon the part of some to show that they had a higher regard for the honor of the profession, than others, has been effectually met by the fact, that they had already brought the standard of requisitions for graduation down to its lowest point, and though making an effort to hold others to a strict adherence to a certain regulation, which can in no way secure qualification, it was notorious, that they recognized no obligation upon themselves—that, indeed, to attend two *winter* courses of lectures was the sum and substance of *their* standard.

Though we do not believe that *time* will ever make it certain, that unqualified men will not be allowed to graduate, yet, we are in favor of any period of study which the Colleges of the country will bind themselves to adopt and conform to, as an indispensable requisition, before a student shall be allowed to graduate.

We would, however, suggest, that the hope of elevating the standard of qualification lies in some other direction, and we feel strongly inclined to advocate—what we have intimated upon a former occasion as our disposition—a separation of the teaching and licensing power.

But, to take a practical and common sense view of this subject—to look at things just as they are—we know the fact that men will go into the medical profession, without regard to colleges, and the people will employ them with equally little regard to their opportunities or qualifications; under such circumstances it is the heighth of folly in our judgment, to expect either medical associations or colleges to *control* the proficiency of the *Doctors* of the land. If a board of medical men who were known to be qualified, could be appointed in each State, before whom, each applicant for license to practice in the State, was compelled by legislative enactment, to go for examination and permission to practice the profession, and in addition to this, the State Medical Societies, and the American Medical Association would require certain *attainments* as a requisition for membership in those bodies, (a part of which has been suggested by the Editor of the New Jersey Medical and Surgical Reporter,) under certain restrictions, something in the way of elevation of the profession might be accomplished. In the freedom prevailing in reference to entrance into any calling in the United States, there must be some higher inducement for men to make attainments in medical science, than the mere license or diploma, which gives permission to pursue the profession.

Notwithstanding these views, we consider it our duty to make every effort to send out properly qualified medical men, and to refuse to graduate those who are known to be incompetent: this has been our practice, and shall continue to be;

and we can assure those who are pursuing the profession, that they can never receive the diploma of this College with a lower grade of qualifications than those required by the most respectable medical institutions in the country; nor, indeed, without a higher grade of qualification than that which we know to be sufficient in some *winter* schools.

## Silver Sutures in Surgery.

We have received the "Anniversary Discourse," before the New York Academy of Medicine, delivered on the 18th of November, 1857, by J. MARION SIMS, M. D., Surgeon to the Woman's Hospital. Published by order of the Academy.

This is a pamphlet of 79 pages, with 22 illustrations accompanying it, from original drawings by Dr. THOMAS ADDIS EMMET, the accomplished Assistant Surgeon to the Woman's Hospital, and, in addition, contains a catalogue of the Officers and Corresponding and Resident Fellows of the New York Academy of Medicine.

Without entering into the merits of any controversy which may exist between the author of this discourse and any other Medical gentleman, we feel constrained to say that we consider that a large debt of gratitude is due the eminent gentleman, not only from those who may be the unfortunate subjects of vesico-vaginal fistula, which has been so successfully treated by his method—and as the result only of the most untiring perseverance, under most discouraging circumstances—but from the whole Medical profession. We have been deeply interested in the history and progress of the laborious and persevering efforts which have finally resulted in one of the greatest achievements known to Surgical science, and covered the principal actor in its accomplishment with imperishable renown. The author seems to be fully sensible of the delicacy of the position which he occupied in the presentation of such a subject upon such an occasion, but we have no hesitation in saying that he was fully justified under the circumstances in thus placing upon record his claim and agency in this great discovery. Whether, in the ardor and enthusiasm of a devotee, he does not in some degree over-estimate the "Silver Suture" in general Surgery, we are not exactly prepared to say, but we presume that there is only one opinion as to the actual value of its substitution for silk, and the great merit which unquestionably attaches to his labors in connection with this subject, whatever modification or improvements have been or may be made in reference to it, and we fully agree, in conclusion, with the sentiment of the following extract from his address. He remarks:

"While I know that posterity will do me full justice, I do not even fear the verdict of my contemporaries, when the whole of the facts and their philosophy are laid plainly before a just and discriminating profession. But, Sir, if you wish to offer a premium for the encouragement of secret remedies, rob me of my well earned claims, as the discoverer and propagator of a great principle that shall live as long as surgery is cultivated as a science, or practised as an art;—and, if you are particularly desirous to drive your young men ambitious of honorable distinction, from their high resolves to elevate and ennoble our calling, show them that you are ever ready to thus endorse any attempt to detract from the meed of their self-sacrificing efforts.

An honorable sensitiveness on the score of professional claims and personal rights is natural, and comes home to every man, whether his reputation be already established, or merely prospective.—And no one, Mr. President, * is more capable of fully appreciating this than your honored self, whose brilliant surgical achievements have so often been the object of envy and detraction."

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* Dr. Mott.

## Prospectus of the Savannah Journal of Medicine.

We have received the prospectus of a Journal to be published under the above title in Savannah, Ga. JURIAH HARRIS, M. D., Professor of Physiology in the Savannah Medical College, and J. S. SULLIVAN, M. D., are to be the editors, and

R. D. ARNOLD, M. D., Professor of the Principles and Practice of Medicine in the Savannah Med. College, associate editor. Although there are already two medical journals in successful operation in the State, still we are confident that another may be sustained, if the profession can only be induced to regard such an enterprise in its true light. Let us not hear it said that there are already a sufficient number of medical journals in the State, but rather, let us be proud that Georgia, in that as in many other enterprises, is outstripping her sister States. Let the profession come up to the work, and sustain her medical journals, and 'ere long, many of the short-comings which are at present so much deplored, will be seen no more. The above Journal is to be a bi-monthly, of seventy-two octavo pages. From the prospectus we learn that every arrangement has been made for its establishment and continuation. The first number will be issued about the first of May. Terms in advance—single copy $2 00; three copies $5 00; six copies $9 00. We wish the enterprise every success, and place it with pleasure upon our exchange list.

## Rights of Authors.

We have received from Prof. Martin Paine, of New York, a portion of the Institutes of Medicine, embracing a chapter upon the "Rights of Authors," the object of which is to set forth the principal details of what he considers himself the unquestionable author in reference to the recent conflicting claims as to priority in certain physiological discoveries. He remarks:

"Upon all questions of priority that concern the advancement of Science and Art, there is, doubtless, a general understanding that the principle should not only be sacredly observed, but that, whenever violated, there should be a common effort to repair the injury. This is alike due to the individual, to the principle, and to the common good. Nor is it less the privilege of the individual, who may have good reason to think that the principle has not been extended to himself, to vindicate his rights, and to appeal to that sympathy which forms the bond of union among honorable men. It is a common cause, and not seldom demands protection.

"The writer is very sensible that unaccountable coincidences often present themselves in the development of new thoughts, and in the discovery of hidden things, especially where enduring reputation may be won. "*Ubi mel, ibi apes.*"—"*Uno tiene la fama, y otro carda la lana.*" But the reader, with these Institutes before him, will quickly find that much that is claimed by Dr. Hall, and all that he has granted to Dr. Campbell, in the foregoing quotation, therefore, all that Dr. Allen appropriates to himself,* abounds in this volume, and, in fact, constitutes the life and soul of the work, as it does, also, of the "*Commentaries*," and of the Essay on the "*Modus Operandi of Remedies*;" nor can the reader fail of the conclusion that, were Dr. Hall's "adjudication," and Dr. Allen's after-thought, founded in any justice, and were not the claimants themselves the obnoxious parties, the present writer would have been long ago convicted by them and by others of arrogant assurance and the grossest plagiarisms. Nevertheless, the Author is most happy to find that his solitary position is becoming relieved, and that a practical direction has been given to his labours by others which cannot fail of carrying forward the great doctrines at which he has toiled, and against manifold obstacles during his professional life."

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* "Unus utrique
Error; sed variis illudit partibus."—Horace

## A Remarkable Case.

In a discussion upon Hysteria, in the *Société de Médecine du departement de la Seine*, a few weeks ago. M. Duparcque, reported the following case: "A young lady, aged 18 years was, in consequence of a rupture with her affianced, attacked with Hysteria. Her symptoms, at first, were such as are usually observed in this disease; a sensation as if a ball ascended from the hypogastric region to the stomach and pharynx, with convulsions, constituted the most prominent. Later, the convulsions alternated with the greatest variety of symptoms and accidents, both general and local, often presenting the appearance of the most acute diseases. She was one evening attacked with the cataleptic form of convulsions, and soon became cold; the whole muscular system was relaxed; complete insensibility; the circulation appeared to be completely arrested. This state continued, and so complete was the suspension of all the signs of life at the regular visit the next morning, that the Physician in attendance at the hospital Beujoin, pronounced her dead. But having examined the patient myself, I thought that I could hear indistinctly, feeble and irregular pulsation of the heart, and as there was some warmth about the chest, I determined to make some experiments before I sent the body to the dead room. A Compress doubled several times upon itself was dipped in boiling water and suddenly placed upon the epigastric region. There was an immediate contraction of the abdominal and thoracic walls, with an incomplete inspiration. This was the only effect from the first application. The second application was followed by a more perfect inspiration, movement, and so on. The patient soon became conscious, and in a short time was restored to health.

## Oglethorpe Medical College.

We learn from the Savannah Republican, that at the recent annual commencement of this Institution, the annual report represented "the School in a highly flourishing condition, with daily increasing prospects of permanency and usefulness."

The Degree of Doctor of Medicine was conferred upon eleven young gentlemen—six of whom were from Georgia; four from South Carolina; and one from Tennessee. The number of the class is not stated, but we learn from another source, that it was between thirty and forty.

## Medical Society of Georgia.

The next annual meeting of the Medical Society of the State of Georgia, will be held in Madison, Morgan county, on Wednesday, the 14th of April, 1858.

EBEN HILLYER, M. D., *Secretary.*

## Newspaper-puffing of Surgical Operations, &c.

We have received a circular from Dr. E. S. Cooper, of San Francisco, California, intended to defend himself against the charge, upon the part of the Pacific Medical and Surgical Journal, of complicity in a newspaper puff of some surgical operation performed by him which had appeared in that city.

We have not been able, perhaps, to gather accurately all the points from the circular, but according to our understanding of the matter, *it is not a triumphant defence.*

In this connection, we would remark, that while, of course, no man should be held responsible for any notice of himself, which is published without his knowledge, it is not sufficient to free a medical man from the imputation of having himself complimented through the *newspapers*, to say, that he did not *solicit* it. Where an editor of a newspaper has been invited to attend an operation, or where special pains has been taken to inform him of some unusual skill in the profession, or, (as we have known,) of some *discovery* in medical science, we have no hesitation in saying, that the individual should be held responsible, and made to account at the bar of medical ethics, for a self-laudation, which is unprofessional, and grossly reprehensible. Non-professional persons, even though they be highly intelligent editors, cannot possibly be competent judges of medical matters—of what is *extraordinary* skill in surgery or medicine, or whether pretensions to *discoveries* in medical science are well founded or otherwise—and, besides, there is a recognized channel through which a medical man has an acknowledged right to communicate anything *to the world*, which he may suppose will contribute to science, or advance his reputation. The Medical Journals of the country are open to all respectable medical men, through which they have the largest liberty to submit to their professional brethren whatever they may suppose to be original or valuable in the way of contributions to science; and he who is not willing to abide by the adjudication of those who it is manifest alone can be competent to judge of such matters, is unworthy of an honorable place in the ranks of a liberal and philanthropic profession.

## American Medical Association.

The eleventh annual meeting of the American Medical Association will be held in the City of Washington, on Tuesday, May 4, 1858...

The Secretaries of all Societies, and other bodies entitled to representation in the Association' are requested to forward to the undersigned correct lists of their respective delegations *as soon as they may be appointed*; *and it is earnestly desired* by the Committee of Arrangements that the appointments be made at as early a period a possible.

The following are extracts from Art. II of the Constitution:

"Each local Society shall have the privilege of sending to the Association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half this numbor. The faculty of every regularly constituted Medical College or chartered School of Medicine, shall have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital containing a hundred patients or more, shall have the privilege of sending two delegates and every other permanently organized medcal institution of good standing shall have the privilege of sending one delegate.

"Delegates representing the medical staffs of the U. S. Army and Navy shall be appointed by the Chiefs of the Army and Navy medical bureaux. The number of delegates so appointed shall be four from the Army medical officers, and an equal number from the Navy medical officers."

ALEX. J. SEMMES, MD.
(One of the Secretaries.)
Washington, D. C.

*New Modes of Applying the Actual Cautery.*—In a late number of the *Union Medicale* we find some suggestions respecting the employment of the actual cautery, which appear valuable for a class of cases in which it is not desirable to have recourse to the severe application of the old method by means of the red hot iron. M. Bonnafond has invented a new "caustic crayon," composed of 75 grains of gum tragacanth, 4 drachms of powdered wood charcoal, and 30 grains of nitrate of potass. The gum is to be dissolved in a sufficient quantity of water to make a thick solution, the process being facilitated by the addition of a little sugar; then the nitre and charcoal, mixed together, are to be added gradually, to form a mass sufficiently consistent to be made into cylinders of different sizes. He afterward found that the nitre might be advantageously omitted.—The end of the cylinder being ignited, is to be lightly applied to different points of the affected part.

In a subsequent number of the same journal, Dr. Chevillion describes a still more simple method of applying the actual cautery. He employs a small roll of linen, one end of which is to be ignited in the flame of a candle. On blowing gently upon the lighted end a few moments, a little red-hot cone is formed, with which the skin is to be touched. In this way fifty or a hundred applications can be made in a few minutes. This method is especially useful in dorsal and lumbar neuralgia, sciatica, old glandular swellings, obstinate facial paralysis, dropsical effusions into the joints, &c·—*Boston Med. &. Surg, Journal.*

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*Effects of Fear.*—A Parisian Physician, during his visits made in a hired fly, had received a bottle of real Jamaica rum as a sample, but found, after returning home, that he had left it in the carriage. He went to the office, and informed the manager that he had left a virulent poison in one of the carriages, and desired him to prevent any of the coachmen from drinking it. Hardly had he got back when he was summoned in gaeat haste to three of these worthies, who were suffering from the most horrible colic, and great was his difficulty in persuading them that they had only stolen some most excellent rum.—*Va. Med. Journal.*

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## Erratum.

In March number, page 389, eleventh line, instead of "Anodynes and Sedatives," read Anodynes and Soporifics. And in 15th line, Soporifics and Anodynes, instead of " Sedatives and Anodynes."

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### *Receipts.*

Drs. J. P. Taylor, Ga., 3d vol.; J. M. Heard, Miss., 2d and 3d. vols.; H. W. Caffey, Ala., 2d and 3d vols.; A. C. Jones, Ga., 3d vol.; Miller & Powell, Ga., 3d vol.

ATLANTA
Medical and Surgical Journal.

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# ORIGINAL COMMUNICATIONS.

## ARTICLE 1.

*Chlorate of Potassa.* By T. S. WEATHERLY, M. D., Montgomery, Alabama.

It seems that epidemics are the order of the day. We have epidemics in politics and religion, and our Profession is at times affected with an epidemic, called Cacœthes Scribendi. Some few years since, this was manifested in the Southern Journals, by innumerable articles upon veratrum viride, dysentery and typhoid fever, and recently I see evidences of its again appearing in the form of chlorate of potassa. It is to this latter subject that I wish to call your attention. If I am not very much mistaken, I wrote the first article upon this subject, which you did me the honor to publish, about twelve months since. In that article it was recommended in Typhoid Fever, and other diseases of the mucous membranes.

I did not pretend to any originality, and so stated in that article. I commenced using it in Typhoid Fever about five years ago. I did so from my idea of its therapeutic action upon mucous membranes, and from the pathology of typhoid fever.

I was living at the time in a Typhoid Fever District, and was exceedingly anxious to find some remedy upon which I could depend. I was pleased with its effects, and have continued its use up to the present time. I think it very probable that other men may have used it in the same way, and for the same diseases, long before I did. But as I remarked above, I believe that my article was the first *publication* upon the subject on this side of the Atlantic, with probably the exception of Prof. Frost, of Charleston, and I think he did not use it in typhoid fever, though of that I am not certain.

It is a matter of very little importance, but you know the old adage—"give the devil his due."

## ARTICLE II.

*The Heart.* By HORATIO N. HOLLIFIELD, A. M., M. D., Sandersville, Georgia.

This organ is one of the most vital importance to the whole animal economy. Should it by disease or by accident be caused to stop performing its functions, then life would become extinct, and man would perish.

Situated in the mediastinum between the, Lungs above the diaphragm, and between the sternum and the vertebra, it is the centre of the circulation. It is a hollow muscular organ, of a conoidal shape, the base of the cone being towards the vertebral column, while its apex is about the junction of the fifth rib, with its cartilage on the left side.

The average size of the heart, I find from the examination of seventeen, to be about four and three-quarter inches in length, and about three inches and a quarter in diameter at the base, and weighing five and a half ounces. It appears that it increases in size according to the age of the patient up to about fifty years. It contains four cavities, a right and left auricle, and a right and left ventricle, but are not all of them of the same capacity,because the right auricle and the right ventricle increase in size as age advances, in a much greater ratio than the left. The walls of the ventricles at birth, are near about the same thickness, but as man advances in age they go on increasing, but not in equal proportions; the walls of the right ventricle being arrested in their growth much sooner than those of the left. The walls of the right ventricle are from two to three lines in thickness, while those of the left ventricle are from five to seven lines.

From the construction of the heart, we see and know that it is a very strong and powerful organ, made so by our divine creator, in order to accomplish the great amount of work which it is its duty to perform, and in order to be able to fully appreciate its labors, it will be necessary for us to make a calculation as to the amount of work accomplished by this little organ, but one which occupies a position second to no other in the whole animal economy.

The left ventricle of the heart, in a healthy man, aged thirty-five years, I found by measurement, would contain two and a quarter ounces of blood—the heart usually empties itself about seventy-five times in a minute, so there will pass through the heart eleven thousand two hundred and fifty ounces of blood every hour, or seven hundred and one and a quarter pounds avoidupois, and in one day there will pass through the heart sixteen thousand eight hundred and thirty pounds of blood, and in one year six million one hundred and forty-two thousand nine hundred and fifty pounds; and in three-score years and ten, the duration of life allotted to man, there will pass through the heart four hundred and thirty millions and six thousand five hundred pounds of blood. In a healthy man, we have about forty pounds of blood which will pass through the heart four hundred and twenty and three-quarter times every day, and one hundred and fifty-three thousand five hundred and seventy-four times every year.

From this, many would suppose that this little organ, in order to accomplish so great a task as this which is imposed upon it, must be endowed with a power analogous to that of perpetual motion, but this is not the case, for the human heart is but a muscle, and like all other muscles of the body, it has its periods of rest, and far from being in a state of continual motion as is generally supposed, it has its alternations of action and repose, whose comparative lengthseems scarcely to differ from the proportions which many other muscles of the animal economy, and particularly the diaphragm and intercostal muscles present in this respect. In fact, in admitting by an approximate calculation approaching very near to exactness, that of the total duration of time occupied by the complete succession of the movements of the heart, one-fourth is occupied by an absolute repose of all its parts, one-half by the contractions of the ventricles, and one-fourth by the contractions of the auricles, we will find that out of twenty-four hours, the ventricles have twelve, and the auricles eighteen hours of repose. In individuals whose pulse gives habitually less than fifty pulsations a minute, the repose of the ventricles is more than sixteen hours a day.

The muscles of voluntary motion have often not more in men engaged in laborious occupations, and among those especially which serve to maintain the head and trunk in an erect position, there are some certainly that repose less, the more so as their action is not perhaps completely interrupted by sleep. (Læunec.) And although the heart does perform an almost Herculean task, yet it is not always at work, but nature allows it in common with all other created things, a period of repose, so that it can rest from its labors, and be enabled to recruit its strength and be capable and ready always to perform its proper functions with regularity and precision.

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## ARTICLL III.

*Cases showing the advantage of heroic doses of Calomel.* By Wm. Hauser, M. D., of Jefferson County, Ga.

An experience of fourteen years, has convinced me that no one thing, nor all other things combined, are equal to Calomel *in Herculean doses*, for the treatment of acute gastritis and bilious colic. Without any waste of words, I give a few cases: First premising that my range of practice lies in that beautiful long-leaf pine, and sand belt of Georgia, near 33d parallel of North latitude, which is checkered alternately with high and dry pine barrenns, celebrated for their healthfulness, and rich alluvial "oak and hickory" lands, where hepatic derangements are found in plenty.

CASE 1st. Wm. Caruthers, of Burke county, aged about 30, tolerably plethoric and of steady habits, when I knew him, was attacked with symptoms of acute gastritis, most violent, October, 1843. Venesection was attempted but failed. The inflammation appeared to progress more rapidly than in any case I have ever noticed before or since. Having no time to trifle with doubtful medicines, I instantly poured down him 40 grains of Calomel and the same of Jalap. He retained it, and in a few hours I repeated the dose. In twelve hours he was happily convalescent, and soon got well.

CASE II. James Wooten, aged about 35, of robust frame and vigorous constitution. Called to him on Monday, May 6th, 1844. He was excessively bilious; looked as though his liver might have failed in its functions a month previous. Suffering with symptoms of acute gastritis, I premised venesection, and gave 85 grains of calomel. It operated in a few hours, and he was quite relieved. The second day he rode out, and seemed entirely cured.

CASE III. Mrs. Lucinda Bryant, of Washington County. I was called to her in consultation with my esteemed friend, Dr. Wm. B. Folks, on the 15th of October, 1855. Her stomach would retain nothing. She was suffering most terribly. My friend had tried everything he could think of, and even calomel itself, but in doses too small to remain in the stomach. I administered, without the least hesitation, ʒi. of this article. She retained it, was relieved in ten hours, and her recovery was rapid. She had been suffering two or three days with gastritis, and death seemed inevitable under any circumstances. Calomel is one of the finest anti-septics in the world, as I have found by a great multitude of experiments, although

Dr. Dunglison does not even mention it as one of the chief articles of that class. I believe its virtues are not fully known. Every body has learned something of its cathartic and febrifuge properties, and its very commonness in the hands of physicians has induced a carelessness about studying its properties and watching its effects. New remedies are the rage, while some of the older and more valuable are treated with unjust neglect, to the detriment of Doctors and their patients.

CASE IV. Miss Julia Parker, of Jefferson County,'185–, case of remittent fever, with frequent vomitings and inability to retain any medicine except calomel. A large dose of this produced immediate quiet, and prepared the way for a speedy recovery.

CASE V. Myself. Called on the 16th October, 1854, to perform a journey of 25 miles, to consult with my friend, Dr. Wm. G. Allen, over a dying lady. My accustomed gastralgia, came on by the time I had made about three-fifths of the distance, and the jolting of the buggy and vomiting for the remainder of the way, developed symptoms of gastritis, and such excessive irritability of stomach, that the gentlest shake of the bed would bring on convulsions horrible to behold. Bleeding, injections, sinapisms, all failed to bring sufficient quiet to the stomach to enable it to retain any thing that was swallowed. At last I asked my friends to give me a tea-spoonful of Calomel. This remained only a few minutes. I then requested a table spoonful. That remained and checked the vomiting. In thirty-six hours it operated and I was relieved.

I might encumber the *Journal* with a large number of cases; but these are deemed sufficient to show the importance of giving calomel in heroic doses to patients suffering from gastritis. And the same holds good in bilious colic wherein bile is vomited in a tide, and the bowels so constricted that no operation can be induced by injections, hot baths, or any medicines that may be given, save calomel. But it must be given in *large doses* to bring speedy and full relief; and there is not the least danger in so administering it. I have in a few cases, been called long distances to consult with young physicians, who, I found, were pursuing the right plan of treatment, saving their timidity in administering calomel. In such cases I have only had to nerve them up to bolder doings, and success has always followed.

# SELECTIONS.

**From the Medical and Surgical Reporter.**

## *Medical Societies and Clinical Reports.*

### PHILADELPHIA COUNTY MEDICAL SOCIETY.

Feb. 10th, 1858. 7½ P. M. Dr. Mayberry, Vice President in the chair. While awaiting the arrival of Dr. T. F. Betton, the lecturer of the evening, Dr. Turnbull related a case of double cephalamatoma.—He was called to a lady in labor, which was so rapid, that the child was born when he arrived. At that time, he noticed nothing remarkable about the child. On the fifth day, his attention was called to a tumor on the head, in fact, two tumors, one on each parietal bone. They were about four and a half inches across. He directed a spirituous lotion, but they still inrceased, and about the seventh or tenth day, he could feel a peculiar hard ridge around the edge of the swelling. He consulted with Dr. J. F. Meigs, who mentioned the fact of having cured such a case, by poulticing and advised a like treatment in this instance. But though poulticed with much care every four or five hours, on the twentieth day there was no material diminution. He then inserted an exploring needle, and blood issued freely. It was evidently under the pericranium. The family being anxious for an operation, he made a free incision at the lower end of one tumor, and in consequence of the free effusion of blood, was compelled to use compresses, and cold applications. When this had ceased, he inserted patent lint, and applied adhesive straps, bandages, and a cap over all. On the following morning, he found the cap saturated with blood, and removed all the dressing, except the adhesive straps. Now, thirty-six days from the com mencement, the tumor has almost wholly disappeared. That on the other side, he did not open, but applied straps, and it also gradually disappeared.

Dr. Condie said these were rare occurrences, he believed, in this city. He had never met with a case; in a practice of fory-three years, where the blood, as in the case related this evening, was situated upon or beneath the pericranium. Tumors are common, in which the blood is effused between the laminæ of the scalp. It would be an interesting fact, could it be determined, to know whether, in Dr. Turnbull's case, the presentation had not been changed in the course of the labor. It is a very common opinion, and perhaps a correct one, that these tumors are produced by the pressure of the uterus upon the fœtal head during labor, the blood being driven into the most advanced part. The worst plan is to open them. If they are caused by a morbid condition of the pericranium, or of the vessels that penetrate the bones, the best plan is to keep them closed. Cold compresses are preferable in his opinion to warm poultices. In Europe, they apply astringent lotions, but he could think of none there, who recommended warm applications. These tumors have been, and are very liable to be mistaken for fractures of the bones.

Dr. **Coates** asked on what part of the parietal bones these were situated?

Dr. **Turnbull** replied that they were on the centre of the bones, directly over each boss, and at present, each bone seems somewhat enlarged.

Dr. **Jewell** had had three of these cases, and all after tedious labor: each was situated on the presenting part. The first remained over three weeks. He used cold astringent lotions, and not succeeding, followed these by poultices; had suppuration, opened the abscess, and extensive purulent discharge followed which left the child with a deformed scalp, and on this part the hair never grew.

In the second case, he used iodine lotions, and after ten or fifteen days, it began to subside, and was soon well. In the third, he also applied the iodine, for ten days, or two weeks and not succeeding, used warm bread and milk poultices, and absorption rapidly followed. The cupped appearance, to which Dr. T. alluded, was present in all these cases; it felt like a depression of the bone, but he did not consider it peculiar to the disease.

As the lecturer had not arrived, and it was past the time for expecting him, Dr. **Condie** proposed for the consideration of the members, an important subject, and one which may be made to throw considerable light on the pathology of disease, &c., viz., *intra-uterine diseases.*—Smallpox has been communicated to the fœtus, and it has been born with the eruption. Children have been born with extensive tuberculization of various organs, which, in some cases, had gone on to softening, and produced inflammation of the neighboring parts. Sometimes, we had disease, when the mother exhibited no symptom of it, as pneumonia, peritonitis, &c. Numerous cases are related of the latter disease, where adhesions have been formed, showing that inflammation of a severe grade had existed. Prof. Simpson, of Edinburgh, had published a paper in which he refers to a number of cases. In a large number of the instances on record, Dr. C. had found the mother had erysipelas, when the child had peritonitis. As the relation between erysipelas and peritonitis is now fully recognized by the profession, and there is not the least doubt but that erysipelas is a disease of the blood, the external phenomena, and concomitant affections of internal organs are merely results of the same blood disease. The mother had escaped, and the fœtus had had peritonitis with effusion and adhesions. The modern doctrine of phlebitis as a cause of pyemia, is that the phlebitis is the result of the diseased condition of the blood itself, and the diffused abscesses are not the result of pus taken into the circulation and deposited in particular parts, but that the depots met with in different organs in cases of empyema are in fact small abscesses produced by inflammation occurring at the place where the pus is discovered. The whole subject of intra-uterine diseases is but in its infancy, and curious results are no doubt to be derived from its close investigation.

One other form of disease is common in the fœtus in utero, and that is erysipelas; in the great epidemics of puerperal fever, at least two-thirds of the children were born with it upon them, and in many, there was peritoneal inflammation.

Dr. Coates mentioned a case of a child with cyanosis, which died in five months, where was found an open foramen ovale, and the lungs were crowded with tubercles, accompanied by emphysema of the kind ascribed by Rilliet and Barthez to children, with large cavities between the lobules, and some of these were one and a quarter inch long.

At the risk of producing disgust at the breakfast table, he would mention a phenomenon concerning eggs. Many were found on breaking them after boiling, to have the membrane adhering to the albumen so strongly, as to tear out patches of its substance. This was formerly rare, but at present a very large number of the eggs were so affected. He considered it due to an amnitis, or inflammation of the amnion, produced by carrying over railroads.

Dr. Mayberry had noticed several instances where children were not susceptible to the vaccine disease, where the mother had been vaccinated while carrying them, and had observed the same result from modified smallpox.

Dr. Condie remaked, that in the first of the modern epidemics of smallpox, in this city, a lady was affected with the modified form during the eighth month of pregnancy. It was light, and no remedy was required; but few imperfect pocks appeared. The child was born covered with genuine smallpox, and died within one hour. He never saw a more beautiful specimen of discrete smallpox, and some pocks had gone on to the period of maturation.

Dr. **Flemming** had attended a lady in labor, who was delivered of a child in a putrid condition. Scarlet fever had been in the family; one child had died with it, while the mother was far gone in her pregnancy. Since that time, she had not felt any movement of the fœtus. The presumption was that the child had died of scarlet fever.

Dr. **Jewell** had, like Dr. Condie, a case of a young father who died of malignant smallpox on the seventh day. On that day, his wife was confined, having had varioloid previously, and the child was covered when born, with a full crop in the first stage, and died of the malignant form.

In connection with this, he mentioned a case of a child born with a mark similar to a vaccine mark on its arm; the mother had been vaccinated during pregnancy.

Dr. **Emerson**, without intending to endorse this last, but considering it as a mere coincidence, would say, that the subject of vaccination during utero-gestation was of importance to decide. In epidemics, pregnant women were desirous of being revaccinated. Some medical men, of very good authority, decline so doing. He would like to hear the sentiments of the members on that point.

Dr. **Condie** asked what possible objection could exist, when we frequently vaccinate a child but a few days old. In the Foundling Hospitals of Paris, every child was vaccinated immediately on being received and distinguished accoucheurs vaccinate within the first three days.—The vaccination of the mother could not produce abortion, and if it really did extend its protective influence to the child, what could be the objection to its perforamance? What harm could possibly result?

Dr. R. K. **Smith** remarked that the queston started this evening opened an interesting field of inquiry. The important practical point to discover, was the one alluded to by Dr. Emerson, viz: "the propriety of vaccinating or revaccinating pregnant woman." The remarks made by the chairman and Dr. Condie presented this subject to the mind in two different points of view. If revaccinating the mother protected the child in utero, or on the other hand, if, as Dr. Condie seemed to infer, it communicated true variola to the offspring, then, indeed, it was important that the question should be decided.

Dr Condie (interrupting). I said nothing of the kind.

Dr. Smith. You certainly related a case that led to that inference, and so did Dr. Jewell.

Dr. Jewell (interrupting). I said nothing about revaccination, or the vaccine disease producing smallpox in the child; I said where modified smallpox had been developed in the pregnant woman, it produced the true disease in the fœtus in the case above named.

Dr. Smith. Well, if Dr. Jewell will explain how modified smallpox or variola vaccinia can occur without vaccination, I will give up the point. He certainly understood both the gentlemen to state their cases precisely as he had related them, and if he was mistaken in regard to Dr. Condie, he apologized for calling him up. He contended that if a child was born covered with a true variolous eruption, imparted to it by the mother from revaccination, it was an operation not to be thought of in pregnancy; but he maintained the diseases of variola and kinepox were entirely different, and would not produce each other. If the views of those gentlemen were correct, it seems the mother conveyed to the child a disease of which she had not the first symptom, as cowpox is a new disease. He did not rise to discuss the question, but simply to refer to it, as a very interesting one, and to suggest that it be made the subject for a future meeting, when gentlemen would come prepared to investigate it thoroughly.

Dr. Condie said that which proves too much, proves nothing. If Dr. Smith's ideas were correct, it would be unnecessary to resort to vaccination in a child born of a vaccinated or variolated female. The protection affoded by vaccination must result from a peculiar change wrought in the tissues of the various organs of the being by the vaccine virus.—We have a new being formed by, and in connection with the maternal organs, which had already undergone this change, in consequence of which she may have the disease in a modified form, or not at all, but the child whose tissues have not undergone the peculiar change, will have it in the unmodified form. Now all these diseases, smallpox, varioloid, and the vaccine disease, are the same in their *first elements*. In epidemics, a patient with varioloid will, and frequently does, give the genuine smallpox to others. It has been shown by experiments in Denmark, Holland, and Germany, that they are one and the same thing; and it has been proposed by Dr. Mohl, of Copenhagen, to inoculate the cow, in order to produce a fresh supply of vaccine matter; he says that he has produced vaccine matter in this way. There is no direct communication between the circulation of the mother and the child By microscopical examination of the blood we find none of its leading features to be identical in the mother and child. There is no connection; they are two independent beings; each builds up its own tissues.

Dr. R. K. SMITH asked how the poison of disease was communicated to the fœtus by the mother if there was no participation by the fœtus in the circulation of the mother? If vaccine disease and variola are similar, why vaccination was resorted to in order to protect rather than inoculation?

Dr. CONDIE answered that it was easy of explanation. If we apply matter to the skin, or arsenic be placed in the food of the mother, it would poison the fœtus. The umbilical vessels take up this, to form blood for the fœtus, and if the blood of the mother is poisoned, the fœtus feels it. But not in all cases are diseases communicated to the fœtus.—These are the exceptions. The modification of the variolous matter which it undergoes by passing though the cow, renders it less dangerous. The vaccine disease is not contagious, but varioloid will give off exhalations and fomites, which poison others. Thousands of cases have proved that varioloid will produce genuine smallpox. That vaccine matter undergoes a change, is admitted by all the Europeans, with the exception of the English.

Dr. EMERSON, in view of the acknowledged risk of a woman in gestation communicating disease to the fœtus, thought the doctrine, if it be true, that variola and vaccine disease are identical, would warrant us in making a distinction in regard to vaccinating or revaccinating a pregnant woman. Revaccination was justifiable, but the other was not, as it might produce smallpox in the fœtus.

Dr. NEBINGER thought himself justified in concluding that children in utero do suffer and die from disease, and also that mothers in this condition have disease which are transmissible, and yet do not transmit them. At this point he would relate three instances:—

A lady died three days after her accouchement of malignant smallpox; the child is living still. Anxious to know the result of disease as to the offspring, he followed up the case, and found no evidence of ever being influenced by the variolous poison. Another lady, seven or eight months gone, had smallpox distinct, and she got safely through; the child was born, and is living; there is no evidence of smallpox having been produced on it. Fearing the poison that might still be lurking about the house, he vaccinated the child and it was fully affected by the vaccine disease. A little girl had violent smallpox. The mother was pregnant; two weeks rolled around, and the girl being convalescent, the mother was confined, and the child vaccinated the day after. This run its course regularly, and varioloid resulted. He did not intend this as an evidence that smallpox was not produced in utero, only as important to know the pros and cons, yeas and nays, of the subject. He did not conclude that cases could not occur of the fœtus receiving disease from the mother; on the contrary, from the well authenticated facts of children being born with the disease (smallpox for instance) that the mother had but a short time prior to delivery, he believed that disease could be conveyed to the fœtus; and the cases related by him were not offered to disprove the fact of the child in utero being affected by the disease the mother was suffering with, but were offered as evidence to prove that the child in the uterus, as is known to be the case out of the uterus, posseses that peculiar condition of system which makes it susceptible to morbific influences. Hence it is that if the mother whilst pregnant should be brought under the influence of the vaccine virus, there is no certainty that the fœtus would be influenced also.

Dr. COATES remarked, in regard to what Dr. Jewell had said conerning coincidence of *marks* on the fœtus, that when young, and engaged in the Pennsylvania Hospital, he saw a pregnant woman who had been badly burned, and the child was born with several patches of skin off the legs, remarkably like the burns. He believed that as the child was killed by the accident, putrefaction had caused this.

Dr. JEWELL saw an interesting case of the kind. A child fell in the street, and lacerated its ear; it was brought to the mother, in her third month of pregnancy, who applied a napkin to the part, took it off, and seeing the whole cheek covered with blood, was much alarmed. When the fœtus was born, the right side of the face was covered with a varicose aneurism. Rut, of course, this was merely a coincidence. He asked that Dr. Condie would give them some new theories to account for this.

Dr. CONDIE replied that it was a curious idea, the gentleman asking for theories, when in all his publications there would be found very little theory. An incident is related by an admirable author, Dr. Buchan, in his "Advice to Mothers." He gives a case, where the shock was so great that the child ought to have been deformed, if it was possible for the mind to effect it. A female in Edinburgh, six months gone, while sitting in her room was much startled by an escaped monkey jumping upon her shoulder. In great alarm she sent for Dr. B., sure that her child would be a monkey, or something horrible; but lo! the fright had no effect. In another case, a baker's wife, in her sixth month, had her husband brought home from a riot with his right shoulder injured.—When the child was born it had a nævus on the left shoulder. Now, as the nurses said this was a mistake, nature should have put it on the right shoulder. In looking over the last edition of Dr. Watson's work, he was much surprised to find that gentleman believing that the imagination of the mother may produce an effect on the fœtus. He could not see how, as there was no nervous connection.

Dr. **Curtis** saw a lady in her first confinement, who, when the child was born, and before she had seen it, asked about the cherry. On enquiry, he learned that three months before, her brother had thrown a black cherry which struck her on the head, and she was certain the child would be marked with a cherry. On examination,he found a nævus exactly on the top of its head, very much resembling a black cherry.

Dr. **Coates** did not believe that the imagination of the parent could impress on the body of the child any mark resembling at all the object which had affected the imagination in a lively manner. But he could not consider this proved by the absence of nerves in the umbilical cord. Gentlemen much respected for their science, who where believers in animal magnetism, considered that the nervous influence could be projected from one individual into the body of another. The nerves end in loops or direct terminations; with considerable spaces between them, as demonstrated by the microscope, and yet we have the nervous action going on without impediment from that cause.

Dr. **Emerson** remembered a case of a child born with spina bifida.—The mother gave, as she thought, a clear account of its cause. She had been much frightened by a great danger to which one of her children had been subjected, in the early part of her pregnancy. The child had been struck with an axe on the lower part of the back, and when she heard it, much shocked she clapped her hand to that part of her back mechanically, and firmly believed this was the cause of the spina bifida. He regarded it merely as a coincidence.

Dr. **Condie** thought that a very stupid archeus governed in the case related, not to put the hand on the part also.

If it were not so late, he would like much to argue some facts stated by Dr. Coates concerning the nervous system but hoped to have an opportunity to do so at some other time.

Adjourned.

## *Valedictory Address.*

**[Delivered March 10th, 1858, to the Medical Graduates of Harvard University, and communicated to the Boston Medical and Surgical Journal.]**

BY OLIVER WENDELL HOLMES, M. D.

*Gentlemen of the Graduating Class,*—It is my grateful duty to address you a few words in the name of the Medical Faculty, under the auspices of which you have just entered the Medical Profession. In their name I welcome you to the labors, the obligations, the honors and the rewards which, if you you are faithful, you may look for in your chosen calling. In their name I offer you the hand of fellowship, and call you henceforth brothers. These elder brethren of the same great family repeat to you the words of welcome. The wide community of practitioners receives you in full communion from this moment. You are enrolled hereafter on that long list of the Healers of men, which stretches back unbroken to the days of Heroes and Demigods, until its earliest traditions blend with the story of the brightest of the ancient Divinities.

Once *Medicinæ Doctor*, always *Doctor Medicinæ*. You can unfrock a clergyman and unwed a husband, but you can never put off the title you have just won. Trusting that you will always cling to it, as it will cling to you, I shall venture to offer a few hints which you may find of use in your professional career.

The first counsel I would offer is this: Form a distinct PLAN for life, including duties to fulfil, virtues to practice, powers to develope, knowledge to attain, graces to acquire. Circumstances may change your plan, experience may show that it requires modication, but start with it as complete as if the performance were sure to be the exact copy of the programme. If you reject this first piece of advice, I am afraid nothing else I can say will be of service. Some weakness of mind or of moral purpose can alone account for your trusting to impulse and circumstances. Nothing else goes on well without a plan; neither a game of chess, nor a campaign, nor a manufacturing nor a commercial enterprise, and do you think that you can play this game of life, that you can fight this desperate battle, that you can organize this mighty enterprise, without sitting down to count the cost and fix the principles of action by which you are to be governed.

It is not likely that any of you will deliberately lay down a course of action pointing to a low end, to be reached by ignoble means. But keep a few noble models before you. For faithful life-long study of science you will find no better example than John Hunter, never satisfied until he had the pericardium of nature open and her heart throbbing naked in his hand. For calm, large, illuminated, philosophical intellect, hallowed by every exalted trait of character, you will look in vain for a more perfect pattern than Haller. But ask your seniors who is their living model, and if they all give you the same name, then ask them why he is thus honored, and their answers will go far towards furnishing the outline of that course I would hope you would lay down and follow.

Let us look, in the very brief space at our disposal, at some of those larger and lesser rules which might be supposed to enter as elements into the plan of a physician's life.

Duty draws the great circle which includes all else within it. Of your responsibility to the Head Physician of this vast planetary ambulance, or travelling hospital which we call Earth, I need say little. We reach the Creator chiefly through his creatures. Whoso gave the cup of cold water to the disciple gave it to the Master; whoso received that Master received the Infinite Father who sent him. If performed in the right spirit, there is no higher worship than the unpurchased service of the medical priesthood. The sick man's faltered blessing reaches heaven through the battered roof of his hovel before the Te Deum that reverberates in vast cathedrals.

Your duty as physicians involves the practice of every virtue and the shunning of every vice. But there are certain virtues and graces of preëminent necessity to the physician, and certain vices and minor faults against which he must be particularly guarded.

And first, of *truth*. Lying is the great temptation to which physicians are exposed. Clergymen are expected to tell such portions of truth as they think will be useful. Their danger is the *suppressio veri*, rather than direct falsehood. Lawyers stand in professional and technical relations to veracity. Thus, the clerk swears a witness to tell the truth, the whole truth and nothing but the truth. The lawyer is expected to get out of the witness not exactly the truth, but a portion of the truth, and nothing but the truth—which suits him. The fact that there are two lawyers pulling at the witness in different directions, makes it little better; the horses pulled different ways in that horrid old punishment of tearing men to pieces; so much the worse for the man. But this is an understood thing, and we do not hesitate to believe a lawyer—outside of the Court-room.

The physician, however, is not provided with a special license to say the thing which is not. He is expected to know the truth, and to be ready to tell it. Yet nothing is harder than for him always to do it. Whenever he makes an unnecessary visit, he tells a lie. Whenever he writes an unnecessary prescription, he tells a lie. It is audibly whispered that some of the "general practitioners," as they are called in England, who make their profit on the medicines they dispense, are apt to be too fond of giving those which can be charged at a pleasing figure in their accounts. It would be better if the patient were allowed a certain discount from his bill for every dose he took, just as children are compensated by their parents for swallowing hideous medicinal mixtures.

All false pretences whatsoever, acted or spoken; all superficial diagnoses, where the practitioner does not know that he knows, or, still worse, knows that he does not know; all unwarranted prognoses and promises of cure; all claiming for treatment that which may have been owing to Nature only; all shallow excuses for the results of bad practice, are lies and nothing else.

There is one safe rule which I will venture to lay down for your guide in every professional act, involving the immediate relation with the object of your cure; so plain that it may be sneered at as a truism, but so difficult to follow that he who has never broken it deserves canonizing better than many saints in the calendar: *A physician's first duty is to his patient; his second only, to himself.*

All quackery reverses this principle as its fundamental axiom. Every practitioner who reverses it is a quack. A man who follows it may be ignorant, but his ignorance will sometimes be safer than a selfish man's knowledge.

You will find that this principle will not only keep you in the great highway of truth, but that if it is ever a question whether you must leave that broad path, it will serve you as a guide. A lie is a deadly poison. You have no right to give it in large or small doses, for any selfish purpose connected with your profession, any more than for other selfish objects. But as you administer arsenic or strychnia in certain cases, without blame; nay, as it may be your duty to give them to a patient; are there not also cases in which the moral poison of deceit is rightfully employed for a patient's welfare? So many noble-hearted and conscientious persons have scruples about any infraction of the absolute rule of truth, that I am willing briefly to discuss and illustrate a question which will often be presented to you hereafter.

Truth in the abstract is perhaps made too much of as compared to certain other laws established by as high authority. If the Creator made the tree-toad so like the moss-covered bark to which it clings, and the larva of a *sphinx* so like the elm-leaf on which it lives, and that other larva so exquisitely like a broken twig, not only in color, but in the angle at which it stands from the branch to which it holds, with the obvious end of deceiving their natural enemies, are not these examples which man may follow? The Tibboo, when he sees his enemy in the distance, shrinks into a motionless heap, trusting that he may be taken for a lump of black basalt, such as is frequently met with in his native desert. The Australian, following the same instinct, crouches in such form that he may be taken for one of the burnt stumps common in his forest region. Are they not right in deceiving, or lying, to save their lives? or would a Christian missionary forbid their saving them by such a trick? If an English lady were chased by a gang of murdering and worse than murdering Sepoys, would she not have a right to cheat their pursuit by covering herself with leaves, so as to be taken for a heap of them? If you were starving on a wreck, would you die of hunger rather than cheat a fish out of the water by an artificial bait? If a school-house were on fire, would you get the children quietly down stairs under any convenient pretence, or tell them the precise truth and so have a rush and a score or two of them crushed to death in five minutes?

These extreme cases test the question of the absolute inviolability of truth. It seems to me that no one virtue can be allowed to exclude all others, with which in this mortal state it may sometimes stand in opposition. Absolute justice must be tempered by mercy; absolute truth by the law of self-preservation, by the harmless deceits of courtesy, by the excursions of the imaginative faculty, by the exigencies of human frailty, which cannot always bear the truth in health, still more in disease.

Truth is the breath of life to human society. It is the food of the immortal spirit. Yet a single word of it may kill a man as suddenly as a drop of prussic acid. An old gentleman was sitting at table when the news that Napoleon had returned from Elba was told him. He started up, repeated a line from a French play, which may be thus Englished—

> The fatal secret is at length revealed,

and fell senseless in apoplexy. You remember the story of the old man who expired on hearing his sons were crowned at the Olympic games. A worthy inhabitant of a village in New Hampshire fell dead on hearing that he was chosen town clerk.

I think the physician may, in extreme cases, deal with truth as he does with food, for the sake of his patient's welfare or existence. He may partly or wholly withhold it, or, under certain circumstances, medicate it with the deadly poison of honest fraud. He must often look the cheerfulness he cannot feel, and encourage the hope he cannot confidently share. He must sometimes conceal and sometimes disguise a truth which it would be perilous or fatal to speak out.

I will tell you two stories to fix these remarks in your memory. When I was a boy, a grim old Doctor in a neighboring town was struck down and crushed by a loaded sledge. He got up, staggered a few paces, fell and died. He had been in attendance upon an ancient lady, a connection of my own, who at that moment was lying in a most critical position. The news of the accident reached her, but not its fatal character. Presently the minister of the parish came in, and a brief conversation like this followed.—Is the Doctor badly hurt?—Yes. Does he suffer much? He does not; he is easy.—And so the old gentlewoman blessed God and went off to sleep, to learn the whole story at a fitter and safer moment. I know the minister was a man of truth, and I think he showed himself in this instance a man of wisdom.

Of the great caution with which truth must often be handled, I cannot give you a better illustration than the following from my own experience. A young man accompanied by his young wife, came from a distant place, and sent for me to see him at his hotel. He wanted his chest examined, he told me.—Did he wish to be informed of what I might discover?—He did.—I made the *ante-mortem* autopsy desired. Tubercles; cavities; disease in full blast; death waiting at the door. I did not say this, of course, but waited for his question.—Are there any tubercles? he asked presently.—Yes, there are.—There was silence for a brief space, and then, like Esau, he lifted up his voice and wept; he cried with a great and exceeding bitter cry, and then the twain, husband and wife, with loud ululation and passionate wringing of hands, shrieked in wild chorus like the *keeners* of an Irish funeral, and would not be soothed or comforted. The fool? He had brought a letter from his physician, warning me not to give an opinion to the patient himself, but to write it to him, the medical adviser, and this letter *the patient had kept back,* determined to have my opinion from my own lips, not doubting that it would be favorable. In six weeks he was dead, and I never questioned that his own folly and my telling him the naked truth killed him before his time.

If the physician, then, is ever authorized to tamper with truth, for the good of those whose lives are entrusted to him, you see how his moral sense may become endangered. Plain speaking, with plenty of discreet silence, is the rule; but read the story of the wife of Cæcinna Pætus, with her sick husband and dead child, in the letters of Pliny the Younger (Lib.

III. XVI.), and that of good King David's faithful wife Michal, how she cheated Saul's cut-throats (1 Samuel, XIX. 13), before you proclaim that homicide is always better than *vericide.*

If you can avoid this most easily besetting sin of falsehood, to which your profession offers such peculiar temptations, and for which it affords such facilities, I can hardly fear that the closely related virtues which cling to truth, honesty and fidelity to those who trust you, will be wanting to your character.

That you must be temperate, so that you can be masters of your faculties at all times; that you must be pure, so that you shall pass the sacred barriers of the family circle, open to you as to none other of all outside world, without polluting its sanctuary by your presence,it is, I think, needless for me to urge.

Charity is the eminent virtue of the medical profession. Show me the garret or the cellar which its messengers do not penetrate; tell me of the pestilence which its heroes have not braved in their errands of mercy; name to me the young practitioner who is not ready to be the servant of servants in the cause of humanity, or the old one whose counsel is not ready for him in his perplexities, and I will expatiate upon the claims of a virtue which I am content to leave you to learn from those who have gone before you, and whose footprints you will find the path to every haunt of stricken humanity.

But there are lesser virtues, with their corresponding failings, which will bear a few words of counsel.

First, then, of that honorable reserve with reference to the history of his patients, which should belong to every practitioner. No high-minded or even well-bred man can ever forget it; yet men who might be supposed both high-minded and well-bred have been known habitually to violate its sacred law. As a breach of trust, it demands the sternest sentence which can be pronounced on the offence of a faithless agent. As a mark of vanity and egotism, there is nothing more characteristic than to be always babbling about one's patients, and nothing brings a man an ampler return of contempt among his fellows. But as this kind of talk is often intended to prove a man's respectability by showing that he attends rich or great people, and as this implies that a medical man needs some contact of the kind to give him position, it breaks the next rule I shall give you, and must be stigmatized as *leze-majesty* toward the Divine Art of Healing.

This next rule I proclaim in no hesitating accents: *Respect your own profession!* If Sir Astley Cooper was ever called to let off the impure ichor from the bloated limbs of George the Fourth, it was the King that was honored by the visit. and not the Surgeon. If you do not feel as you cross the millionaire's threshold that your Art is nobler than his palace, the footman that lets you in is your fitting companion, and not his master. Respect your profession, and you will not chatter about your "patrons," thinking to gild yourselves by rubbing against wealth and splendor. Be a little proud—it will not hurt you; and remember that it depends on how the profession bears itself whether its members are the peers of the highest, or the barely tolerated operatives of society, like those Egyptian dissectors, hired to use their ignoble implements, and then chased from the house where they had exercised their craft, followed by curses and volleys and stones. The Farther of your Art treated with a Monarch as his equal. But the Barber-Surgeon's Hall is still standing in London. You may hold yourselves fit for the palaces of princes, or you may creep back to the Hall of the Barber-Surgeons, just as you like. Richard Wiseman, who believed that a rotten old king. with the *corona Veneris* encircling his forehead with its copper diadem, could cure scrofula by laying his finger on its subject,—Richard Wiseman, one of the lights of the profession in his time, spoke about giving his patients over to his "servants" to be dressed after an operation; We do not count the young physician or the medical student as of menial condition, though in the noble humility of science to which all things are clean, or of that "entire affection" which, as Spenser tells us, "hateth nicer hands," they stoop to offices which the white-gloved waiter would shrink from performing. It is not here, certainly, where John Brooks—not without urgent solicitation from lips which still retain their impassioned energy—was taken from his quiet country rides, to hold the helm of our Imperial State; not here, where Joseph Warren left the bedside of his patients to fall on the smoking breastwork of yonder summit, dragging with him, as he fell, the curtain that hung before the grandest drama ever acted on the stage of time—not *here* that the Healer of men is to be looked down upon from any pedestal of power or opulence!

If you respect your profession as you ought, you will respect all honorable practitioners in this honored calling. And respecting them and yourselves, you will beware of all degarding jealousies and despise every unfair art which may promise to raise you at the expense of a rival.—How hard it is, not to undervalue those who are hotly competing with us for the prizes of life! In every great crisis our instincts are apt suddenly to rise upon us, and in these exciting struggles we are liable to be seized by that passion which led the fiery race-horse, in the height of a desperate contest to catch his rival with his teeth as he passed, and hold him back from the goal by which a few strides would have borne him.—But for the condemnation of this sin I must turn you over to the tenth commandment, which, in its last general clause, unquestionably contains this special rule for physicians—*Thou shalt not covet thy neighbor's patients.*

You can hardly cultivate any sturdy root of virtue but it will bear the leaves and flowers of some natural grace or other. If you are always fair to your professional brethren, you will almost of necessity encourage those habits of courtesy in your intercourse with them which are the breathing organs and the blossoms of the virtue from which they spring.

And now let me add various suggestions relating to matters of conduct which I cannot but think may influence your course, and contribute to your success and happiness. I will state them more or less concisely as they seem to require, but I shall utter them magisterially, for the place in which I stand allows me to speak with a certain authority.

Avoid all *habits* that tend to make you unwilling to go whenever you are wanted at any time. No over-feeding or drinking or narcotic must fasten a ball and chain to your ankle. *Semper paratus* is the only motto for a physician!

The necessity for *punctuality* is generally well understood by the profession in cities. In the country it is not unusual to observe a kind of testudinous torpor of motion, common to both man and beast, and which can hardly fail to reach the practitioner. Punctuality is so important, in consultations especially, to the patient as well as the practitioner, that nothing can excuse the want of it—not even having nothing to do—for the busiest people, as everybody knows, are the most punctual. There is another precept which I borrow from my wise friend and venerated instructor, the Emeritus Professor of Theory and Practice; and you may be very sure that he never laid down a rule he did not keep himself.—Endeavor always to make your visit to a patient at the same regular time, when he expects you. You will save him a great deal of fretting, and occasionally prevent his sending for your rival when he has got tired of waiting for you.

Your conduct in the sick room, in conversation with the patient or his friends, is a matter of very great importance to their welfare and your own reputation. You remember the ancient surgical precept—*Tuto, cito, jucunde.* I will venture to write a parallel precept under it, for the manner in which a medical practitioner shall operate with his tongue; a much more dangerous instrument than the scalpel or the bistoury. *Bre-*

*viter, suaviter, caute.* Say not too much, speak it gently, and guard it cautiously. Always remember that words used before patients or their friends are like coppers given to children; you think little of them, but the children count them over and over, make all conceivable imaginary uses of them, and very likely change them into something or other which makes them sick, and causes you to be sent for to clean out the stomach you have so unwittingly filled with trash; a task not so easy as it was to give them the means of filling it.

The forming of a diagnosis, the utterance of a prognosis, and the laying down of a plan of treatment, all demand certain particular cautions. You must learn them by mistakes, it may be feared, but there are a few hints which you may not be the worse for hearing.

Sooner or later, every body is tripped up in forming a diagnosis. I saw Velpeau tie one of the carotid arteries for a supposed aneurism, which was only a little harmless tumor, and killed his patient. Mr. Dease, of Dublin, was more fortunate in a case which he boldly declared an abscess, while others thought it an aneurism. He thrust a lancet into it and proved himself in the right. Soon after, he made a similar diagnosis. He thrust in his lancet as before, and out gushed the patient's blood and his life with it. The next morning Mr. Dease was found dead and floating in his own blood. He had divided the femoral artery. The same caution that the surgeon must exercise in his examination of external diseases, the physician must carry into all his physical explorations. If the one can be cheated by an external swelling, the other may be deceived by an internal disease. Be very careful; be very slow; be very modest in the presence of Nature. One special caution let me add. If you are ever so accurate in your physical explorations, do not rely too much upon your results. Given fifty men with a certain fixed amount of organic disease, twenty may die, twenty may linger indefinitely, and ten may never know they have anything the matter with them. I think you will pardon my saying that I have known something of the arts of direct exploration, though I wrote a youthful Essay on them, which, of course, is liable to be considered a presumption to the contrary. I would not, therefore, undervalue them, but I will say that a diagnosis which maps out the physical condition ever so accurately, is, in a large proportion of cases, of less consequence than the opinion of a sensible man of experience, founded on the history of the disease, though he has never seen the patient.

And this leads me to speak of prognosis and its fallacies. I have doomed them, and seen others doom, over and over again, on the strength of physical signs, and they have lived in the most contumacious and scientifically unjustifiable manner as long as they liked, and some of them are living still. I see two men in the street, very often, who were both as good as dead in the opinion of all who saw them in their extremity. People will insist on living, sometimes, though manifestly *moribund.* In Dr. Elder's life of Kane you will find a case of this sort, told by Dr. Kane himself. The captain of a ship was dying of scurvy, but the crew mutined, and he gave up dying for the present to take care of them. An old lady in this city, *near her end,* got a little vexed about a proposed change in her will; made up her mind not to die just then; ordered a coach; was driven twenty miles to the house of a relative, and lived four years longer. Cotton Mather tells some good stories which he picked up in his experience, or out of his books, showing *unstable equilibrium* of prognosis. Simon Stone was shot in nine places, and as he lay for dead the Indians made two hacks with a hatchet to cut his head off. He got well, however, and was a lusty fellow in Cotton Mather's time. Jabez Musgrove was shot with a bullet that went in at his ear and came out at his eye on the other side. A couple of bullets went through his body also. Jabez got well, however, and lived many years. *Per contra,* Colonel Rossiter, cracking a plum-stone with his teeth, broke a tooth and lost his life. We have seen physicians dying, like Spigelius, from a scratch; and a man who had had a crowbar shot through his head and well. These extreme cases are warnings. But you can never be too cautious in your prognosis, in the view of the great uncertainty of the course of any disease not long watched, and the many unexpected turns it may take.

I think I am not the first to utter the following caution:—Beware how you take away *hope* from any human being. Nothing is clearer than that the merciful Creator intends to blind most people as they pass down into the dark valley. Without very good reasons, temporal or spiritual, we should not interfere with his kind arrangements. It is the height of cruelty and the extreme of impertinence to tell your patient he must die, except you are sure he wishes to know it, or there is some particular cause for his knowing it. I should be especially unwilling to tell a child that it cannot recover; if the theologians think it necessary, let them take the responsibility. God leads it by the hand to the edge of the precipice in happy unconsciousness, and I would not open its eyes to what he wisely conceals.

Having settled the cautious course to be pursued in deciding what a disease is, and what its course is to be; having considered how much of your knowledge or belief is to be told, and to whom it is to be imparted, the whole question of treatment remains to be reduced to system.

It is not a pleasant thing to find that one has killed a patient by a slip of the pen. I am afraid our barbarous method of writing prescriptions in what is sometimes fancifully called Latin, and with the old astrological sign of Jupiter at the head of them to bring good luck, may have helped to swell the list of casualties. We understand why plants and minerals should have technical names, but I am much disposed to think that good plain English, written out at full length, is good enough for anybody's use. Why should I employ the language of Celsus? He commonly used none but his own. However, if we must use a dead language, and symbols that are not only dead, but damned, by all sound theology, let us be very careful in forming those medical quavers and semiquavers that stand for ounces and drachms, and all our other enlightened hieroglyphics. One other rule I may venture to give, forced upon me by my own experience. After writing a recipe, make it an invariable rule to read it over, not mechanically, but with all your faculties wide awake. One sometimes *writes* a prescription as if his hand were guided by a medium—automatically, as the hind legs of a water-beetle strike out in the water after they are separated from the rest of him. If all of you will follow the rule I have given, sooner or later some one among you will very probably find himself the author of a homicidal document, which but for this precaution might have carried out its intentions.

With regard to the exhibition of drugs as a part of your medical treatment, the golden rule is, *be sparing*. Many remedies you give would make a well person so ill that he would send for you at once if he had taken one of your doses accidentally. It is not quite fair to give such things to a sick man, unless it is clear that they will do more good than the very considerable harm you know they will cause. Be very gracious with children especially. I have seen old men shiver at the recollection of the rhubarb and jalap of infancy. You may depend upon it that half the success of Homœopathy is due to the sweet peace it has brought into the nursery. Between the gurgling down of loathsome mixtures and the saccharine deliquescence of a minute globule, what tender mother could for a moment hesitate?

Let me add one other hint which I believe will approve itself on trial. After proper experience of the most approved forms of remedies, or of such as you yourselves select and combine, make out your own brief list of real every-day prescriptions, and do not fall into the habit of those extemporaneous, fancy-combinations, which amuse the physician more than they profit the patient. Once more: if you must give a medicine, do it in a manly way, and not in half doses, hacking but not chopping at the stem of the deadly fruited tree you would bring down. Remember this, too; that although remedies may often be combined advantageously, the difficulty of estimating the effects of a prescription is as the square of the number of its ingredients. The deeper you wade in polypharmacy, the less you see of the ground on which you stand.

It is time to bring these hurried and crowded remarks to a close. Reject what in them is false, examine what is doubtful, remember what is true; and so, God bless you, Gentlemen, and Farewell!

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## *Report to the State Society by Committee on Rheumatism.*

BY SAMUEL DE BOIS, M. D.

To make this Report as full of interest as it were possible, your Committee sought aid, by early appointing as auxiliary members several gentlemen well qualified to render assistance, but unfortunately they, in every instance, failed to make their contributions;—therefore, coming from such a source, and unaided, the inferiority of the production will give no surprise. But, justice to ourself requires it to be said that circumstances have almost wholly deprived us of the necessary time and opportunity for consultation of others.

To form a just conception of what is expected is, perhaps, the greatest difficulty connected with the duty with which this association has thought proper to honor us; for the almost universal tendency in man is to *overreach,* especially in efforts to be brought before the public. That it is not a Treatise on Rheumatism that is here called for, the fullness of the works extant, coming from men of the highest talents, abundantly argues; but, supposing it to be, to simply set forth what observation and experience have led us to believe to be some of the best established facts in relation to the nature of the disease and its best mode of treatment, and in the absence of something better and more appropriate, we submit to you the following:

New discoveries we can claim none; but in that part of our State in which we have been acquainted, Rheumatism has appeared to be on the increase with the improvement of the country, with an increasing tendency to the acute form for the last few years; and from opportunities afforded for the basis of an opinion, would say: If there is, among the diseases with which the human body is afflicted, one which is the result of *altered chemical conditions*, it is Rheumatism—all its phenomena pointing to a poison contained in the system, somehow introduced, or elaborated within, or, what is more probable, consisting of effete material which has failed to be conveyed out of the system, composed of one or more elements, the result of certain elective affinities, and possessing as some have supposed, an acid re-action, from the prevalence of acids in the excretion, and the nature of the remedies that have proved most successful. These views seem to be supported by the fact of the supervention of the complaint in those persons inhabiting climates where the variations of temperature, called changes of weather, are sudden and frequent, and especially in those whose exposure to such vicissitudes (in combination with moisture) have the effect of suddenly modifying the amount of excretions of the body, particularly that of the skin.

A general acquaintance with what has been said by our Standard Authors upon the disease rendering unnecessary a full description, we will only notice a few main points of interest.

For consideration, it is usually divided into Acute and Chronic, or Inflammatory, and Non-Inflammatory, but we see all grades of intensity of action, from the high and peculiar inflammation down to the most trifling local manifestation.

Besides its migratory characteristics, the great point of difference to be noticed between rheumatic and the ordinary inflammation is, that we never see the former running to suppuration, or to several other results common to the latter, of equal intensity. True, it is claimed by some that they have witnessed rheumatic inflammation of such intensity that suppuration was produced; but it is probable that this effect in the cases referred to was due to an intercurrent inflammation of the erysipelatous, or common variety, or that the occurrence of a deep-seated abscess, as in the hip-joint, was mistaken for Rheumatism—a case of which came under our own observation, in which the deception was truly marvelous, yet in time well cleared away. Following the distinction a little farther, as says one of our first auhorities, "Throughout all this febrile disturbance, there is no coma, no marked trouble of the stomach or of the bowels, no vomiting, no diarrhœa, no petechiæ, no aphthæ, no sordes about the mouth, all of which are of ordinary occurrence in the course of common continued fevers"; which it is fortunate to remember in some masked cases of difficult diagnosis.

There seems to be a little difference of opinion among writers, as to whether the Acute form is apt to run into the Chronic.* Our own limited observation leads to the belief that such a transition may frequently be *expected, even under active treatment.* And here, we beg leave, in few words, to give a case.

Young L., on a bright warm Sunday, in March, A. D. 1856, amused himself by wading in water running over the ice, following the course of a stream connecting two small lakes for the distance of nearly a mile; then spent some time on the ice. In a few days he was attacked with Acute Rheumatism; his pulse about 120 to 130. The usual alterative and alkaline treatment assisted by opium, was resorted to, which considerably controlled the symptoms for several weeks, but with little real improvement. Fibrous deposits, and the consequent enlargement of the joints, occurred, followed by usual maifestation of the chronic form of the complaint, when he fell into the hands of a Quack of the Thompsonian species, and is to this day a cripple.

The marked contrast observed in symptoms, and in the kind of treatment indicated in the two forms of the complaint, has tempted some into the belief that they were really two diseases; but we regard such differences only as results growing out of the same philosophical grounds, as that which discovers as striking a difference in the symptoms and treatment called for in the sthenic and asthenic forms of ordinary inflammation. Another important view of the subject may be taken by distinguishing it as *Articular, Visceral, or Neuralgic.* Mixed cases are of every day occurrence; which is sometimes a fortunate circumstance, as a means of correct diagnosis, which would in some cases be otherwise difficult.

The first point of interest in purely *Articular* is the chronic enlargement-deformity, and consequent failure of function of the joints, which frequently occurs, and *sometimes* in patients under vigorous and orthodox treatment. Of this, we meet with two kinds: one, which is the result of fibrinous deposit, the other of synovial effusion; in both the diseased action is, at first, exterior to the synovial cavity. The former we meet with most freqeuntly in the robust and plethoric, with more frequent tendency to attacking the heart, while the latter oftener is seen in those of weak constitutions, sometimes approaching a cachexia

Another lesion attendant on the more chronic cases, is that peculiar state of the synovial cavities and sheaths of the tendons which produces the friction-sound, a peculiar squeaking both to be heard and felt. This may, however, often be discovered in the sub-acute form of ordinary inflammation of these structures, resulting from violence.

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* See Miller's Principles of Surgery, 4th American Edition, page 61; Also, Watson. Then Dunglison's Medical Dictionary, 9th Edition, Revised, on Rheumatism.

Among internal organs liable to be attacked, we notice the heart and its appendages, the diaphragm and pleura (constituting Pleuritic Rheumatism, or Rheumatic Pleurisy), the ligamentous attachments of the liver and the stomach (constituting Gastric Rheumatism, or Rheumatic Gastralgia.)

If delirium occur in a case of Acute Rheumatism, almost certainly the heart is implicated; which it is well to remember, at least so far as to lead to such exammination of the case as to not allow this fearful complication to escape detection; for it may here be remarked, that if pericarditis once establish itself, and the patient temporarily escape with his life, the organ usually undergoes lesions that are, in time, certainly fatal. "With this exception" says WATSON, "we do not find patients in Acute Rheumatism delirious." But we have observed that patients who are apparently laboring under a strong tendency *towards* an implication of the heart in the disease, or in whom the heart is almost imperceptibly affected, appear as though inspired with a strange horror of some thing, they know not what, and somewhat resembling what has been described by patients laboring under hydrophobia, but to a minor degree, and yet seem to recover without the usual phenomena attending rheumatic pericarditis.

The *Pleuritic* we have known to so closely resemble ordinary pleurisy as to render the case puzzling to our limited training in diagnosis, at the attack. It is quite frequently confounded, no doubt, with an attack of the intercostal muscles, and oftener accompanied by the same. A peculiarity of the disease in this locality is, that, when carefully sought for, the friction-sound may be discovered, although sometimes only when the patient forcibly elevates the ribs by deep inspiration—indicating the state of a portion of the pleural surfaces. And we have sometimes witnessed sudden and violent traumatic attacks of the complaint in the pleura and intercostals, following the puncture of abscess in the mammæ, etc. The acute and continual pain that is often experienced, with the great stricture in breathing in this form of attack, is little short of that which is characteristic of true pleurisy in its severest form; and when it is of a more chronic character, the pain in the chest is of such a peculiar character, that some hypochondriac and hysterical grannies of both sexes have tried in vain, with their "pain in the chest," year after year, to die with "consumption," even down to a good old age. And, when extending to the appendages of the liver, it constitutes a large share of the "*liver complaint,*" now so polite an affection, affording Quacks an opportunity to try their skill with mandrake pill; and they are generally successful, in time—so far as the pocket is concerned.

Rheumatic Gastralgia is one sort of, or rather is frequently taken for, dyspepsia; and is often an intractable complaint, the more so from being so frequently misunderstood.

And this brings us to another boundary of the subject, viz, the *Neuralgic* form; which is, according to our observation, most usually combined with anæmia, and the consequent peculiar irritability of the nervous system; difficult to distinguish from ordinary neuralgias, if indeed there be a difference; exceedingly painful, at night especially; affecting the teeth, jaws, face, etc., and, as above said, the stomach. And here we beg liberty to offer the conjecture that *angina pectoris* with all the discovered structural or organic changes in and about the heart, will yet be found to be due to the chronic lurkings of the poison; also that fearful tetanus;—both the eccentric offspring of the rheumatic diathesis, strange as it may appear.

We also see Rheumatism fixing itself in the most aggravated form, upon those whose constitutions have undergone a decided depression from the effects of mercury or syphilis, producing the most horrible distortion of the frame—as WATSON says, "one crooked joint is the copy of its fellow." A striking instance of this was the case of Mr. B., an early settler in this State—strong and healthy—after using an astonishing quantity of *Ung Hydrarg.* by way of a general friction, for what he supposed to be itch; following its specific effects, he was attacked almost immediately with Rheumatism, which soon transformed him into the most dreadfully misshapen cripple for life.

Thus we have here a disease, appearing to occupy an intermediate place, insensibly blending with the febrile or inflammatory on one extreme, and with the cachectic on the other.

When we consider that few diseases are capable of inflicting greater amount of suffering, within a given length of time, than Rheumatism, it becomes exceedingly desirable to arrive at a knowledge of the most ready means of relief. But says one of our most reliable authors—"Now you may be sure—when men's opinions concerning the treatment of a disease which is of common occurrence, and easy recognition, are thus unsettled and diverse—you may be sure, first that no specific for that disease has yet been discovered, and secondly, that the disease is not very steadily obedient, to any remedial plan." This was uttered several years ago, and to-day we do not feel very well prepared to contradict it, but from observation and testimony, naturally infer that class of remedies which may be more directly addressed to the peculiar chemical condition of the system under the disease, will be most successful. And such experience proves to be true, besides a strictly chemical view.—The treatment is therefore *antiphlogistic. alterative*, and *restorative.*

Among the *Antiphlogistics* the means that have proved most useful in Rheumatism are, first, those of direct depletion, as bleeding, purging and emetics; secondly, sedatives, as opium, antimony, veratrum and colchicum in large doses. The *Alteratives* are mercury, the alkaline salts, iodide of potassium, colchicum, and counter-irritation (the word "alterative" being used in this paper in the sense of including the agents of the direct chemical action). The *Restoratives* are, iron, quinine, iodide of potassium, and *warmth.*

Referring again to the standard works for the details of treatment, we merely notice certain points of particular interest; and, first, with regard to *Bleeding.* Some authors recommend bleeding with considerable freedom; others, with great caution. The latter class receive our most hearty approbation. And WATSON (whose views of this disease as a whole please us best of any we have seen), after recommending the practice with some freedom, says: "Yet, looking to my own practice in Acute Rheumatism, I find that although I am in the almost daily habit of treating it,—for it, is a disorder from which our wards are never perhaps entirely free,—I rarely prescribe phlebotomy." And, again: "So that the cases in which I am tempted to employ the lancet, are few and far between." The *rule* we would here offer is: In cases of highly inflammatory re-action, as shown by the pulse, and if the patient be young and plethoric, *bleed*, and not otherwise, even in the cardiac complication, unless early in the case and in all cases with the greatest caution; for in some patients the cardiac affection will be produced by injudicious bleeding, when it would not otherwise have occurred. And in the cases which promise most from bleeding, if it be carried to the extent (by error of judgment with the practitioner, or peculiarity of the patient) of producing any thing approaching what may be called the hæmorrhagic pulse, almost certainly the patient is lost; for if the heart be too much emptied of its contents, a greater task is imposed upon it, in the greater effort required in the performance of its function. Then, when bleeding is resorted to, let it be conducted with a view to producing the greatest sedative effect, with the least loss of blood, yet guarding against actual syncope, as favoring the deposit of one of those little mischievous appendages about the valves, from the fibrinous state of the blood, with all its dreadful consequences, endocarditis being so often coincident.—Admitting the temporary relief to be usually immediate and great, and the greater facility with which other remedies act, yet we regard a tolerably full heart (other things being equal) of the two, the most favorable to the desired result of this fearful complication.

In addition to bleeding, judiciously employed, we most heartily endorse the sentiment of WATSON, in saying that *Mercury,* boldly pushed to its defibrinating effect, with *Opium,* is the only hope, after pericarditis is once fairly established. It is then that the matter becomes that of a choice between two evils,—mercurialization, or death of the patient more or less immediately: and it is then that the class of *Quacks* who plead "No Mercury," become most ridiculous, as there is no other article that will answer as well. And in the less urgent cases, the more cautious use of mercury with opium is the most valuable means in the treatment of all cases of the inflammatory form, to allay the violent action then to be superseded by the milder alteratives or eliminatives.

Pretty free *Purging,* or at least an active state of the bowels, is very essential in assisting to eliminate the poison and reduce the febrile excitement. As a sort of temporary cure, any thing that produces a great sedative or relaxing effect on the system is generally highly successful, at least in allaying the more acute symptoms; therefore we frequently find that an antimonial emetic, will produce very beneficial results; also veratrum viride, or, what seems to act still better, veratrum and colchicum equal parts, given once in three hours in such doses as to produce a great sedative effect; or the colchicum alone in large, or we might as well say, dangerous doses, as we found in one two instances in which we prescribed it, in the early part of our practice, and being a little deceived as to the strength of the article, the doses given producing some of its specific effects, such as protracted vomiting, but the Rheumatism, which was of a high grade of violence, was speedily missing, on which we took occasion to congratulate ourselves, yet secretly confessing the remedy almost as bad as the disease. This plan of operation is understood by some aside from our Profession. The Thompsonians accomplish the same by giving the lobelia inflata, in large quantities. And too good to be lost, is the expression of a gray-headed specimen of this sect, who, on hearing the above case related, and evidently ignorant of the remedy used, put on a sapient look, and gravely remarked, "*I should have paralyzed her* [the patient] *with Lobelia!*"

The colchicum in small doses, as ordinarily given, probably assists, but more especially in gout, by promoting the elimination of urea from the system.

What has been said of the merits of the alkaline salts, we believe experience will justify; and are inclined to the belief that most of the apparent failures with these remedies (at least in our practice) has been attributable to their not having been given in sufficiently large doses, and *sufficiently continued*; for almost frightful quantities seem often to be required—not grains, but drachms and ounces.

*Counter-irritation* is most particularly beneficial in the rheumatic affections of the internal organs. A patient is attacked with what his friends suppose to be a pleurisy of violent character; but, from some peculiarities, we infer the difficulty to be rheumatic, and apply a blister to the chest, when suddenly all the stricture is relieved, plainly distinguishing it from real pleurisy. Thus blistering over the stomach and liver, in rheumatic cases, often does great things in a short time—in this respect differing from the effect in inflammatory cases.

And this introduces the subject of *External Applications* in general. In the inflammatory form, patients are apt to think cold applications agreeable and beneficial; but we do not hesitate to say that they are, not only dangerous, but hurtful, favoring metastasis, and even hindering the most speedy disposition of the case. The best external application with which we are acquainted, is a hot alkaline solution, made from the wood ashes always at hand in the fireplace. These fomentations are to be large, and continued, and the results have often suggested the idea of a local specific, or chemical effect, from the potash. The more chronic cases that generally call for stimulants and frictions, may be treated externally by the rubefacient effect of strong ammoniated liniments.

In the *Neuralgic* forms, accompanied by anæmia and scrofula, ammonia must be mostly substituted for the salts of stronger base, and iron sesq. ox. used freely and *protractedly* with iodide of potassium, and, above all things with those of rheumatic habit, *extra warm clothing* of wool. Morphia will often be required for immediate relief.

And after we have said all, we sometimes find ourselves most rascally mortified for want of success, in a given case—at any rate patients will take it out in grunting, if for no other reason than to dampen the feelings of the physician in expectation of his fee.

These fragments of thought are respectfully submitted to your consideration. They are thus brief, and scattered, for want of greater facilities, and because given at random, and especially because we would avoid, as far as possible, unnecessarily repeating what has been already said by others, and therefore uncalled for; and if we have not the ability to carry it out, we would at least indorse the sentiment—

"Floriferis ut apes in saltibus omnia libant
Omnia nos itidem."

[*Peninsular & Independent.*

## *Extracts from the Transaction of the Baltimore Pathological Society.*

By W. Chew Van Bibbeb, M. D.

### *Croup.*

**Dr Riggin Buckler** said, on Friday evening Nov. 6th, we were called to see a little girl aged 20 months, of a delicate and feeble constitution, suffering from an attack of croup. The following is the history of the case:

For the previous ten days she has had repeated attacks of catarrh, for which her parents had dosed her with ipecac., tart. emetic, &c. On the morning of Nov. 6th her cough, which hitherto had been loose and moist, changed its character, and became dry, tight and croupal. We saw her in the evening at 8 o'clock, when she presented the following symptoms: Face flushed; skin hot and dry; pulse rapid and feeble; respiration quick and apparently embarrassed; cough frequent, dry and croupal; voice very hoarse; chest sounds clear; over both lungs diffused subcrepitant rales; throat of a deep dusky red (but perfectly free from deposit); tongue dry and coated; much restlessness; tosses herself continually about the bed. Has been vomited 4 or 5 times during the day, and had one or two loose stools. Ordered tart. ant. $\frac{1}{40}$ gr. every 3 hours; hot foot bath, &c., to be repeated 2 or 3 times during the night.

Saturday, Nov. 8, 9 o'clock A. M.—Condition much the same; has slept but little during the night; antimony has nauseated her, and vomited her once; no further action on bowels. Continue antimony; give every 4 hours a powder of ii grs. calomel, ¼ gr. ipecac., iii grs. nit. potass.; apply turpentine externally to the throat; diet light.

2 o'clock P. M.—Symptoms aggravated; breathing much embarrassed; has been vomited freely, and the bowels have been opened 3 or 4 times Examined throat, and for the first time found it completely coated with a soft white caseous deposit, easily detached. Blew into throat ʒi finely powdered alum. Copious vomiting, which cleared out the throat completely. A solution of sulph. copper was then freely applied to the fauces. This afforded her much relief, and she fell into a quiet sleep of some hours' duration.

6 o'clock P. M.—Has an increase of fever; bowels are very loose; breathing easier; no alteration in the cough or voice; both dry and hoarse. Again applied copper to the throat, and ordered antimony and the powders to be discontinued.—Take of chlorate potass. 20 grs., syr. ipecac. 20 gtts. in a dessertspoonful of infus. senega every 4 hours.

11 o'clock P. M.—It was neccessary to use the alum again to relieve the throat of the deposit

Sunday Nov. 9, 9 A. M.—Has slept part of the night; has less fever, and looks pallid; heat of skin not great; bowels very loose; has had 6 or 8 copious water stools since we last saw her; cough not improved; she seems to be much exhausted; the tonsils have still deposit upon them.—Ordered an astringent mixture for the diarrhœa; continue at longer intervals (5 or 6 hours) the chlor. potass.; milk as diet; wine whey occasionally.

12 o'clock M.—Has had but one stool since we saw her; has taken more nourishment than heretofore; the deposit in the throat has increased; used the alum again, which re moved nearly all of it. Continue treatment.

6 o'clock P. M.—No improvement in croupal symptoms; diarrhœa has been checked. Injected into larynx arg. nit. grs. xx to the ounce.—A violent fit of coughing followed, during which a piece of tough, consistent false membrane, about a half inch long and a quarter inch wide, was coughed up. Free vomiting followed, and brought away more of the deposit. This afforded much relief.

11 o'clock P. M.—She fell into a sleep soon after we left, which lasted about two hours. She has a light increase of fever; and though she seems easier, still there is not the least change in the character of her cough; voice still very hoarse.

Monday Nov. 10 o'clock A. M.—Has had some sleep during the night; her general symptoms are no worse, but the local affection is still the same; there is yet much deposit in the throat. The following course was now pursued. By the aid of several screens a small tent or chamber was constructed. This was covered with blanket, and a comfortable settee for the nurse was arranged within. Into this the child well wrapped up in a blanket, was placed along with the nurse, and by means of an apparatus consisting of a tin boiler, which could be easily and constantly heated by the ordinary fire in the room, and a tin pipe of some 6 feet in length, connected with the boiler, we were enabled to introduce into the above chamber a constant supply of vapor. Continue the chlor. potass. Milk and chicken water for nourishment.

12 o'clock M.—We found the child asleep. Her skin is moist and pleasant; breathing is decidedly better, and has lost much of its harsh, dry sound.

4 o'clock P. M.—Condition much the same as at 12 o'clock; voice is still hoarse, but the respiratory sounds, together with the cough, are more moist.

In the evening, at 11 o'clock, when we made our visit, our little patient was coughing most violently, during which she vomited, and threw off several pieces of soft, greyish false membrane. Her nurse states that shortly after our last visit in the afternoon, she noticed that the cough of the child had, as she termed it, become very rattly.

The next day, Nov. 11, 10 o'clock A. M. the nurse states that she has slept nearly all the night. Her symptoms are decidely better in all respects; she seems worn out, and inclined to sleep; cough is less frequent, and perfectly moist and free, more catarrhal than croupy in itse character; she has no fever.

From this period, for the three succeeding days, she was kept under the moderate use of the chlor. potass, and under the tent, breathing altogether the warm, moist air.

On the 16th of November, she was playing about, apparently perfectly well, and up to the present date has had no return of the croup.

We have reported this case in full, Mr. President, and must plead as an excuse for having thus trespassed upon your time, the many points of interest that cases of this kind must necessarily offer. Recoveries from this form of croup are rare occurrences, and any one to have seen how bad a subject our patient was to withstand such an attack, would never have imagined she would have recovered. Her age, delicate constitution, health already impaired by previous sickness and treatment, together with a strong predisposition to struma, were all against a favorable prognosis.

Since the first of this year, this case makes the sixth of the kind we have met with. Three occurred among our patients, one in the practice of Dr Thos. H. Buckler, one in that of Dr. Bull, and one patient belonging to no particular doctor, but operated on by a physician of this city, and died under the knife. Of the six cases, three were males; three females; three died; three recovered; one of those that died, as already stated, fell a victim to the operation of tracheotomy. (See case reported to society by Dr. F. Donaldson.) Two of the three that died were boys; both were under two years of age; the girl was over six years. The three that recovered were all under two years of age. In every instance the false membranes could be distinctly seen in the fauces. In three of these cases the chlorate potassa was given freely from almost the commencement of the attack. In two of these "the vapor inhalation" was used, and both recovered. The other occured in the summer time, and died soon after being attacked.

It may be interesting to you to know that the three cases specially observed by us had been in bad health, and had suffered from catarrhal and gastric affections prior to the attack of croup, and all of them were born of parents essentially strumous. The deposit on the fauces in these cases resembled granular coagulated albumen, and was soft, friable, and unctuous to the touch.

We would especially wish to direct the society's attention to the employment of the "vapor inhalation" as an adjunct in the treatment of these cases. The benefit derived from the inhalation of vapor in the treatment of laryngeal affections in the adult, are well known to medical men. It was recommended also in the treatment of infantile croup many years ago, by Dr. Warren of Boston; but the mode advised for applying it was entirely different. Thus it was suggested to place the patient in a hot bath of water and cover all with a blanket so as to get the full benefit of the steam. This method, it will be seen at a glance, has many disadvantages. The immersion of our little pationt in hot baths tends much to increase their exhaustion. And besides, to the majority of children such a routine of hot bathing would frighten them so much that it is questionable whether they derive much benefit from the treatment. We have seen the vapor bath applied in two cases, in the manner which we have just described, and which was first suggested to us last winter by Dr. John Buckler. Both of the cases were decidedly benefited by it. Under its influence we have noticed—1st. The temperature of the skin is lowered; the fever is lessened; the skin becomes moist (even when the child is wrapped in a blanket.) 2dly. The breathing is easier, and the cough is less frequent, losing its dry and rude character, and becoming moist and loose.

Dr. ARCHIBALD GEORGE read the following paper upon the anatomy and diseases of

## *The Prostate Gland.*

Notwithstanding the industry lavished upon the study of this organ by anatomists, many points in relation to it are still obscure, as we may judge from the fact that the number of lobes is still a question, many writers considering it a unique body, others holding that it consists of several. It is, however, so intimately connected with the neighboring organs as to need a few anatomical considerations before we can approach the main subject of this paper.

The prostate is then, as regards its structure, a gland of the species termed "clustered" or "en grappe," composed of granulations, from each of which is sent off an excretory duct, which unites with those of neighboring granulations, to form troncules and trunks. These open for the most part, upon the inferior surface of the prostatic urethra on either side of the veru montanum. Some terminate upon the sides, or at points more or less near the superior or inferior surface of the urethra, although none have yet been found opening immediately upon the superior wall.—The largest of them open upon the posterior part of the channels existing on either side of the veru montanum, directly in front of the internal orifice of the urethra, in a cul de sac, which sometimes offers an impediment to the entrance of a sound into the bladder In the condition of hypertrophy this cul de sac becomes quite profound, and the orifices of the ducts so enlarged that a fine bougie easily penetrates in the body of gland. The number of these ducts is from 12 to 15, and when injected with mercury are found to possess an arborescent disposition. Where they terminate they pass under the muscular fibre subjacent to the mucous coat of the urethra, and open obliquely upon the latter. The smallest troncules are lined by pavement epithelium, where a tube is formed of the diameter of $\frac{1}{20}$ of a millimetre. This becomes prismatic or cylindrical, and in the larger tubes vibratile cilia are added. In addition to the proper secretory and excretory apparatus. is an accessory tissue, intimately associated with the former, and composed of fibres of cellular tissue disposed in fascettes, and accompanied by finely granular amorphous matter. These fascetted are directed in every direction, but generally run paralled with the ducts. Through this basement structure are distributed a number of nervous fillets derived from the hypogastric plexus, a dependence of the great sympathetic. Its arteries come from the inferior vesical, middle hemorrhoid and internal pudic. The gland is surronnded by a proper envelope continuous with the structure just mentioned. Its color is tawny, reddish yellow, and creaks under the scalpel. Amussat and Civiale admit that it is composed of three lobes—two lateral and one middle (inferior of Vidal de Cassis). The latter is termed by Velpeau the pathological lobe, being, according to him, the, most common cause of retention of urine. According to Hall and Morgagni, the organ is uniqve. Sir Everard Home taught same doctrine as Amusat. Spiegel and Ledran admit but two lobes, while Serres holds that it is composed of no less than four lobes—the two internal uniting at an early age to form one—a central. Whatever be their number, it is quite certain that in the adult their union is so intimate that they cannot be easily separated, if at all—a union further strengthened by the envelope referred to, and by a layer of muscular fibres from the bladder.

*Form.*—The prostate has generally been likened to a cone flattened vertically and anti-posteriorly, the base resting behind upon the neck of the bladder, and its summit being anterior and under the urethra. This statement or comparison is incorrect; the transverse diameter is greater than the vertical, and the base is not perpendicular to the axis. Roberi describes six faces to the gland, but Sappey seems to admit but two, and gives these dimensions: inferior face, 31 millemetres; superior, 18; width at base, 40; height, 27. The dimensions vary much, however, at different ages. Thus, in the child it is quite rudimentary, and in the adult does not acquire a size in proportion to the rest of the generative apparatus. In age hypertrophy is common, indeed, seems to be the proper physiological condition of the organ in advanced life.

*Position.*—The prostate is situated in the angle formed by the rectum, where it changes its antero-posterior direction for a vertical one as it plunges towards the anus. The summits of the organ and of the angle exactly correspond. Its relations with the bas fond of the bladder are these—when the latter is empty, and the rectum voided, the base of the prostate is covered by peritoneum. At the urethral orifice of the bladder its mucous coat adheres to the gland—an adherence rendered yet greater by its continuation with the prostatic portion of the urethra. But the muscular tissue of the bladder has the most intimate connections with the prostate, for some of its longitudinal fibres arising from the summit of the bladder, embrace the lateral and superior parts of the gland, and the walls of two first portions of the urethra adjacent, before being inserted upon the pubis, while others are inserted upon the base of the gland.

*Relations wtth the urethra.*—The urethra, in passing through the gland is lodged much nearer the superior than than the inferior surface, there being about four-fifths of the organ under the canal. Amussat and some other writers contend that the urethra merely lies in a sort of channel in the top of the gland, but their error is, as Sappey has shown, in confounding the superior portion of the prostatic ring with the sphincter of the neck of the bladder and anterior longitudinal fibres of the mass adhering to it. When the base of the prostate is examined, two canals are seen upon it. The superior and largest is that for the neck of the bladder and urethra, while the inferior corresponds to the neck of the seminal vesicles and the ejaculatory canals. The latter is lined by a fibrous sheath sent from the prostato-perineal aponeurosis. An artery, vein, and two or three lymphatics pass through this orifice These canals are not very adherent, and may be readily followed by mercurial injection. At their point of termination in the urethra, they are separated by a portion of urethral mucus, termed the "prostatic utricle," whose size is proportionare to that of the ejaculators. Its anterior extremity communicates with the urethral cavity, by an oval orifice occupying the most prominent portion of the veru montanum. When the ejaculatory ducts are full, this orifice is closed, and when they are emptied the orifice again opens. It hence seems simply to be a provision by means of which an easy dilatation may be effected for the passage of the sperm at the moment of ejaculation. Evidently this anatomical description of the prostate is necessarily imperfect, hut my limits compel me to turn to more practical points in its consideration. The use of the prostate seems to be to give support and solidity to the organs it encircles, bearing some analogy to the iron hoops which the pump maker places upon the joints of his stocks. The neck of the bladder is enabled to sustain its form, and to bear the weight of accumulated urine above it without risk of laceration. In its strong embrace the joining of the urethra and bladder is safely accomplished, and the other organs traversing it securely protected. Its function is the secretion of a fluid destined to lubricate the urethra and to mingle with the semen. It is of a milky aspect, of oily consistency, transparent, and of little tenacity. It is composed of a serum, numerous fatty granulations, gray molecular granulations, cells of prismatic epithelium, with vibratile cilia, and frequently various concretions. To this fluid the semen owes its *whitish color.*

*B. Diseases.*—One of the most interesting topics in connection with this gland is its relation to the disease termed spermatorrhœa. Its role in this affection is most important, and not less so from the fact that it is often overlooked. To the valuable work of Lallemand we owe the first light shown upon a subject then obscure—and I believe that at the present date the principal doctrines advanced by him are placed beyond a doubt—that nocturnal pollutions are consequent upon excess of venery, masturbation, indulgence of erotic ideas and reading of filthy books, occurring with erection and sensation--which become diminished as the affection advances; that diurnal pollutions are primarily dependent upon the same causes and secondarily upon slight irritation even; sometimes a lascivious idea, or touching the genitals, with slight orgasm, if erection be impossible—are all points for the elucidation of which we owe much to M. Lallemand and his school. But in regard to true spermatorrhœa, a flow quite passive, of semen during micturition and defecation, without sensation or even consciousness, other than its traces upon the clothes or in the urine, or on the outlet of the urethra—the same unanimity by no means exists. Indeed it is the opinion of many eminent men, among whom is Ricord, that the talented physician of Montpellier has rather injured his cause in that portion of his works which treats of true spermatorrhœa. Lallemand seems indeed to have hurried to his conclusions in rather an unphilosophical manner, and many of the means of diagnosis given by him are rather extraordinary, as coming from a man of his capacity. The true state of the case seems to be that spermatorrhœa may sometimes occur, but very rarely, and that when during defecation or micturition, traces of its presence are found, it is dependent on the fact that the sperm had remained in the ducts since the last regular pollution, the orgasm not having been sufficiently strong to throw it off. And as the prostrate is in this affection the seat of more or less morbid action, its deviations, while compressing and closing the ejaculators, afford the means of retaining the sperm until change of position or efforts shall displace them. At other times, and by far more frequently, the supposed seminal fluid is found to be merely the prostatic product poured out in unusual quantities. The prostate may itself in certain conditions of irritation become a cause of nocturnal pollutions. But the valuable paper read before you by Dr. Frick obviates the necessity of pursuing this theme further.

Tumefaction of the prostate commonly occurs in subjects over 45 years of age, and may be partial or general. The latter is, however, comparatively rare, but occassonally is so great as to nearly fill the bladder. But even in these cases the tumefaction is not uniform, and chiefly affects the median portion. Partial tumefaction affects the body or lateral lobes. In the first case there may be a slight prominence shaded off towards the periphery, or a transverse bar, or even a pediculated tumor —that is, a projection whose base is smaller than its summit; or it may assume the opposite conditions. The lateral lobes increase either in a transverse direction or an intero-posterior one. This latter tumefaction, where unconnected with that of the body, does not much alter the urethral canal. Commonly, it simply flattens it in the form of a slit. Tumefaction of a single lobe does not alter the calibre, but changes the direction of the canal. As it increases, however, and becomes more general, the trouble does not cease with deviation, but the neck of the bladder is dragged back, and the membranous portion of the urethra pushed forwards, exerting a deplorable influence upon the bladder, and rendering catheterism difficult.

Dr. Wilkins has recently exhibited to you the proper sounds to be used in these cases, and the manner of introducing them, so that it will be unnecessary for me to reiterate them. The glandular substance is commonly found normal, sometimes softened, and the ducts enlarged and engorged; sometimes the mass is tough, with no visible alteration of structure. The results of tumefaction are hypertrophy of bladder and dilatation of the urinary passages. Unaccompanied by inflammation, these are the only serious results. It may be detected by a rectal examination The ribbon shaped faces are considered diagnostic of swelled prostate, but it is obvious that the sphincter ani alone impresses a form upon the dejections. Perhaps there is, however, reason in believing that its pressure upon the rectum may produce hemorrhoids or prolapsus of the gut. This sketch of enlarged prostrate of course extends to exceptional cases. Generally, it is not so far increased in size as to cause any great disturbance, and may be successfully treated by leeches to the perineum; warm hip baths; frictions with unguent iodine, and the catheter.

*Acute inflammation* was formerly considered of rare occurrence, but is now admitted to be frequent. According to Ricord, it is consequent upon blennorhagia and bad treatment, and is announced by perineal pain, difficult and scalding micturition, retention of urine, painful defecation, constipation, and pain along the course of the sciatic nerve, together with pain in sitting down or crossing the legs. If there be much swelling and fluctuation it will be detected by the finger; and in this examination cáre must be taken not to confound the apparent fluctuation of the gland with that of the vesiculæ seminales. The generative functions are commonly disordered, and nocturnal emissions may occur. The general reaction is seldom great; sometimes there is vomiting and tympanitis. The means of diagnosis between this inflammation and that of the neck of the bladder, consists in the fact that in the latter there is constant desire to pass water, while in the former the frequency of dejection does not appear to be affected. The common termination is of course in abscess, which may, if unpunctured, discharge into the urethra, destroying the ejaculatory ducts, or into the bladder, vesiculæ, the surrounding cellular tissue, rectum, or force their way into the penis and scrotum. Abscesses may be one or more in number. When they discharge into the bladder, we can only detect it by examining the urine, but when they empty into the urethra, pus is generally voided suddenly, or at intervals, in such quantities as to leave no uncertainty. The post-mortem examination shows the follicles filled with pus resembling scrofulous tubercle, the surrounding structure being healthy, or infiltrated with pus or pultaceous matter. The work of disintegration may go on so completely as to leave but a mere shell. As soon as fluctuation is ascertained, the gland should be immediately punctured. Some discussion has arisen as to the best place for doing this—many writers prefering the urethra—many the perineum. As for myself, I prefer the latter, from the much greater certainty we have in directing our instrument; and on the other hand, from the danger of producing stricture by the formation of a cicatrix in the urethra. The other part of the treatment consists in numerous leeches to the perineum, opiate enemata, and warm bath. We must also guard against retention of urine by the free use of the catheter. But in spite of our precautions, the foundation for chronic inflammation is often laid. This, when severe, presents many of the symptoms above described, which increase in violence after exposure or excess; the urine becomes forked, sometimes mingled with blood; sexual connection is painful; constipation obstinate, and great difficulty in introducing the catheter. The progress of chronic inflammation is slow, but by no means less sure on that account, with a constant tendency to complication of neighboring parts—to ulceration of the prostate; to inflammation of the bladder, and to urinary fever. At the same time the effect upon the morale is deplorable—melancholy and indifference are common, and finally the subject is carried off by exhaustion. The prognosis is, of course, unfavorable. The treatment consists of care, rest, diet, opiate clysters, hip baths, and leeches. So long as the retention of urine is but slight, the catheter must be avoided. When the necessity arrives, we are to meet it with firm measures. If we cannot insinuate the catheter through the prostate, we must perforate the gland by pushing a prepared sound through it—a much better means than opening the bladder above the pubes or per rectum.

In regard to atrophy of the prostate, calculous affections, epithelimata, cysts, tubercle, fibrous tumors, etc., I can only remark that my limits place it out of my power to give them any other consideration than a mere enumeration.

Dr. PHILLIP S. FIELD read the following paper:

The case in question is one of interest—not only from its obscurity, but also from the difference of opinion expressed by consulting physicians.

Its history (as near as I can trust to memory) is as follows: Cassandra P., an unmarried lady, formerly a resident of this county, called upon me professionally, November 21, 1856, stating that two weeks previous she contracted a violent cold by sitting in a current of air during profuse perspiration, whilst suffering with her catamenia, which caused a cessation of the same. During the night she had a severe chill, followed by high fever, and on the following morning called in a homœpathic physician, who pronounced her case to be (as she expressed herself) "dropsy of the womb." She continued under this gentleman's treatment two weeks; was then conveyed by her parents to their residence in the country, and by them I was requested to attend her. Upon examination, I found that she was laboring under *ascites*, the abdomen being enormously distended by the effusion. There was almost an entire suppression of urine, not voiding over half an ounce in twenty-four hours; which was of a brownish red color, and thickly loaded with mucus. Complained of a dull, heavy pain over the region of the kidneys, with an occasional twang, as though pierced with some sharp instrument. Cupped her freely, and ordered an infusion of juniper berries and bi. tart. potassæ. Continued this for several days, with some improvement in the secretions of the kidneys. Abdominal effusion very little if any diminished. Prescribed hydrarg. proto. chlor. ℨij; pulv. digitalis; pulv. rad. scillæ ℨi. M. and ft. Pills xx. One three times daily. Continued these until she became slightly pytalized, with marked benefit. This I followed by an occasional hydragogue cathartic, composed of elaterium and ext. colocynth comp.

Did not see her again for three weeks, owing to indisposition, during which time she was visited *once* by my friend Mr. Donaldson, who, finding her very much debilitated, suggested the propriety of giving some preparation of *iron*, and I had prepared pills of citrate of iron and quinine, each pill containing five grains—one to be taken three times daily.

On visiting her after my recovery, I found that the abdominal effusion had almost entirely disappeared, and the kidneys gradually resuming their natural secretions. She stated that during my absence, she had suffered with violent pain of an intermittent character in the lower part of the bowels, which caused me to examine the seat of pain, and discovered for the first time a hard body occupying the position of the the uterus.

I immediately suggested the necessity of making an examination per vaginam, to which she would not consent, without the advice of another physician, to which I cheerfully consented; and they selected an eminent surgeon of Baltimore, who, upon examination pronounced her pregnant. I then made an examination, found the uterus in situ; the neck somewhat enlarged, and firm. By pressing firmly the neck of the uterus I could feel a large hard substance, evidently occupying the walls of the *uterus*. I then examined the mamma and the areola around the nipple, but could discover no evidence of pregnancy. From the absence of any positive symptoms in my own judgment, I was compelled to differ with the *physician consulted*, and pronounced it a *fibrous tumor*—in which *diagnosis* I was confirmed by the concurring opinion of Dr. Donaldson, who, by request, visited her again with me—and which *time* has more positively proved, as the lady is enjoying at this date comparatively good health. Her catamenia has been regularly performed during the last three months, though the *tumor* still remains.

[*Virginia Medical Journal.*

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*On the Injection of Urea and other substances into the blood.* By WILLIAM A. HAMMOND, M. D., Assistant Surgeon U. S. Army. Read before the Biological Society of Philadelphia, January 18th, 1858.

The principal object in view in undertaking the experiments detailed in this paper, was that of deciding upon the correctness of the theory advanced by Frerichs,* explanatory of uræmic intoxication. As is well known, this distinguished author regards the symptoms of blood poisoning, so frequently present in Bright's disease, as not directly depending upon the presence of urea in this fluid, but as being caused by its conversion, through the agency of a ferment, into carbonate of ammonia.

Frerichs performed two series of experiments, which he regards as tending to sustain his hypothesis. In the first series he injected a solution of urea into the blood of animals whose kidneys had been previously removed. In from 1¼ to 8 hours they became restless and vomited.—Ammonia was detected in the expired air, and simultaneously convulsions ensued. Death occurred in from 2½ to 10 hours from the commencement of the experiment. Ammonia was found in the blood, the contents of the stomach, and in the bile and other secretions.

In the second series a solution of carbonate of ammonia was injected. Convulsions ensued almost immediately, and were quickly followed by stupor. The respiration was labored, and the expired air was loaded with ammonia. This substance, however, gradually disappeared, and the animals recovered their senses.

Frerichs offers no explanation of the nature of the ferment which he conceives to be necessary to produce uræmic poisoning, nor does he even attempt to demonstrate its existence, except indirectly, through the experiments above cited.

While admitting the facts set forth by these experiments, I am constrained to differ with Frerichs in his theory. Ammonia has often been met with as a constituent of the expired air of healthy individuals. I have myself frequently detected it in such cases; it has been demonstrated to be constantly present in the blood; and Frerichs' own experiments (those of the second series) show that it was not capable of causing death even when injected directly into the circulation, and when its presence in the blood was evidenced by its being exhaled in large quantity from the lungs.

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* Die Bright'sche Fierenkrankheit und deren Behandlung.

The fact that in the first series of investigations the kidneys were extirpated, while in the second the animals unmutilated, while different substances were used in each, prevents our drawing any comparative conclusions from the results obtained.

The experiments to which the present paper relates consisted of two series. In the first the substances were injected into the blood of the sound animal; in the second the kidneys were previously extirpated.—The two series were, as far as possible, alike in every other respect. The substances injected in both series were urea, urea and vesical mucus, carbonate of ammonia, nitrate of potash, and sulphate of soda.

### FIRST SERIES.

1st *Experiment.* UREA.—Into the jugular vein of a large dog I carefully injected 60 grains of urea, dissolved in 4 ounces of distilled water.

No immediate effect was produced. After the lapse of 15 minutes the respiration became more hurried, and the animal began to show signs of uneasiness. At the end of 1½ hours slight spasms of the limbs ensued, and lasted about 10 minutes. These were followed by a disturbed sleep of two hours' duration. The dog then awoke, passed a large quantity of urine, and seemed perfectly well; no other abnormal symptoms occurred.

Ammonia was at no time detected on holding a rod, previously dipped in chlorohydric acid, in the current of the expired air.

The urine of this dog, for the twenty-four hours immediately preceding the commencement of the experiment, amounted to 932 cubic centimetres, and contained 287·39 grains of urea. For the twenty-four hours commencing with the experiment, the quantity of urine was 1268 cubic centimetres, and the urea 341·12 grains—a difference of 336 cubic centimetres of urine and 53·73 grains of urea in favor of the second day. The solid food on both days was the same; the amount of water drank was less on the second day than the first.

From this experiment it is perceived that, of the 60 grains of urea injected into the circulation, 53 73 grains were recovered from the urine, leaving a balance of but 6·27 grains unaccounted for; but which, however, was probably excreted with the urine under some othor form.

*2d Experiment.* UREA AND VESICAL MUCUS.—60 grains of urea were dissolved in 5 ounces of distilled water, mixed with 115 grains of vesical mucus,* and carefully introduced into the jugular vein of a dog. The symptoms which followed were almost identical with those of the first experiment, except that the sleep was about 30 minutes longer. On awaking a large quantity of urine was passed. No Ammonia was discovered in the breath. The animal recovered perfectly.

For the twenty-four hours previous to this experiment, the urine of this dog amounted to 823 cubic centimetres, and contained 194·21 grains of urea. For the second period of the twenty-four hours the urine amounted to 1459 cubic centimetres, and the urea to 272·86 grains, being an increase of 536 cubic centimetres of urine and 78·65 grains of urea—18·65 grains more than were injected into the circulation. The solid food was the same on both days; the water somewhat more on the second than the first.

*3d Experiment.* CARBONATE OF AMMONIA.—60 grains of carbonate of ammonia, dissolved in 4 ounces of water, were injected into the jugular vein of a large dog. Symptoms of great uneasiness almost immediately followed. The animal staggered about the room, and, after a few moments, fell and lay panting and moaning on the floor. At the end of two minutes, copious fumes of chloride of ammonium were produced by holding a rod, on which were a few drops of chlorohydic acid, to the mouth. Convulsions ensued at the end of 5½ minutes from the commencement of the experiment, and continued 10 minutes. They than ceased, and did not recur. Ammonia continued to be evolved from the lungs for 1¾ hours. The dog remained in the recumbent posture for two hours. Three hours after the commencement of the experiment, he evacuated a quantity of ammoniacal urine. He recovered perfectly.

During the twenty-four hours preceding this experiment, the dog eliminated 1327 cubic centimetres of urine, which contained 345·82 grains of urea. For the succeeding period the quantity of urine was 1654 cubic centimetres, and the amount of urea 296·53 grains, an increase of 227 cubic centimetres in the urine, and a diminution of 48·29 grains in the urea. The food was of the same character and quantity on both days; the amount of water drank was slightly greater on the second day.

The symptoms observed after the introduction of the carbonate of ammonia into the blood, it is seen, did not correspond altogether with those which followed in Frerich's investigations. Thus, there was no vomiting nor stupor, and the convulsions were not of so violent a character. The quantity of carbonate of ammonia injected by Frerich is not stated by him, and the difference in the effects may be due to a difference in the amount of this substance introduced into the circulation.

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* It is well known that to this latter substance is ascribed the power of converting urea into carbonate of ammonia out of the system. I was desirous of ascertaining how far its influence could be exerted in the blood within the system.

*4th Experiment.* NITRATE OF POTASH.—I injected 60 grains of nitrate of potash, dissolved in 4 ounces of water, into the circulation of a medium sized dog. Convulsions of a violent character almost instantly ensued, and continued, with occasional intermissions, for 1¾ hours. There was also vomiting and severe retching. Stupor followed, and lasted till the death of the animal, which took place at the end of 5 hours and 25 minutes from the commencement of thc experiment. No ammonia was detected in the breath.

*5th Experiment.* SULPHATE OF SODA.—Sixty grains of sulphate of soda, dissolved in four ounces of water, were injected into the jugular vein of a medium sized dog. Convulsions quickly followed, and were very severe, lasting about two and a half hours, with short intermissions. The dog vomited twice. Stupor ensued upon the convulsions, and was present for about three hours. The dog gradually recovered his senses, but was disposed to remain quiet fer the balance of the day. The next day he seemed entirely well.

The urine of the twenty-four hours preceding the experiment amounted to 1125 cubic centimetres, and the urea to 211·34 grains. For the twenty-four hours commencing with the experiment, the quantity of urine was 1283 cubic centimetres, and of urea 201·15 grains—an increase in the urine of 158 cubic centimetres, and a decrease in the urea of 6·19 grains.

## SECOND SERIES.

In this series, as before remarked, the kidneys were removed previously to the introduction of the substances experimented with into the circulation. Extirpation of these organs is not necessarily attended with an immediately fatal result. A dog will live from one to four days after this operation, when it has been carefully performed.

*1st Experiment*, UREA.—I removed the kidneys from the dog used in the first experiment of the foregoing series. He bore the operation exceedingly well, and even appeared somewhat lively after it. Three hours subsequently I injected 60 grains of urea, dissolved in 4 ounces of water, into the jugular vein. Convulsions ensued at the end of 45 minutes, and continued with alternations of stupor for 6½ hours, when the animal died. There was no vomiting. No ammonia was at any time detected in the breath.

The post-mortem examination showed a healthy condition of the stomach and bowels. No ammoniacal odor was perceived.

A portion of the fluid contents of the stomach were mixed with a little caustic baryta, in a test tube, and gently heated. On holding a glass rod, moistened with chlorohydric acid, over the mouth of the tube, no fumes of chloride of ammonium were formed, showing, therefore, the absence of ammonia.

By employing caustic potash instead of baryta, and then applying the glass rod as before, copious fumes of the chloride of ammonium were produced. This arose from the conversion of the urea present into carbonate of ammonia through the action of the potash.

The presence of urea in the stomach was directly determined by evaporating a portion of the fluid contents to dryness, at a low heat, by means of the water-bath, treating the residue with alcohol, and again evaporating to dryness. By digesting the solid residue with warm water, filtering, and adding nitric acid to the filtrate, crystals of nitrate of urea were formed in considerable quantity.

The fact that no ammonia was discovered in the breath or contents of the stomach of this animal is in direct opposition to the results of Frerich's experiments. I think it will be generally admitted that had any ammonia been present, it would have been detected by the means employed, and conjoined to the fact that such unequivocal evidences of the existence of urea in the stomach were indicated, leave no doubt of the non-conversion in this instance, at least, of the urea into carbonate of ammonia.

The death in this case is, therefore, I think, fairly to be attributed to the direct action of the urea upon an organism brought into an abnormal condition by removal of the kidneys. In Bright's disease a similar condition of the system is present, and may exercise a like influence over the action of the urea which has accumnlated in the blood.

2*d Experiment.* UREA AND VESICAL MUCUS.—Having previously extirpated the kidneys from the dog used in the corresponding experiment of the foregoing series, I injected into the circulation 60 grains of urea, dissolved in 4 ounces of water, to which 115 grains of vesical mucus had been added. The dog remained quiet for nearly an hour, when violent convulsions ensued, and continued, with but slight intermissions, for 5½ hours. Vomiting of billious matters occurred but twice. Stupor followed the convulsions, and remained till death, which took place at the end of 8 hours and 20 minutes from the commencement of the experiment.

No ammonia was detected in the expired air or vomited matters, nor was any discovered after death in the contents of the stomach. Urea was indicated in these latter by the method employed in the previous experiment.

The same remarks are applicable to this experiment as to the preceding, as the results are almost identical. In addition, it will be remarked that the mucus injected exercised no influence on the composition of the urea introduced into the circulation with it.

3*d Experiment.* CARBONATE OF AMMONIA.—After extirpating the kidneys, I injected into the jugular vein of the dog previously used in the corresponding experiment of the preceding series, 60 grains of carbonate of ammonia, dissolved in 4 ounces of water. Convulsions ensued in five minutes, and continued almost uninterruptedly for 3½ hours. Stupor followed, and remained present till the death of the animal, which took place 6 hours and 18 minutes from the commencement of the experiment. During the convulsions there were several times vomiting of chyme and mucus which gave a strong ammoniacal odor.

Ammonia was detected in the breath in 2½ minutes after the injection into the blood. No post-mortem examination was made.

From this experiment it is seen that carbonate of ammonia is speedily fatal after being introduced into the circulation of an animal deprived of its kidneys.

4*th Experiment.* NITRATE OF POTASH.—Sixty grains of nitrate of potash were introduced, dissolved in 4 ounces of water, into the circulation of a medium sized dog whose kidneys had been removed three hours before. Convulsions followed in 4½ minutes, and continued for 3½ hours, when the animal died. There was neither vomiting nor stupor, but undoubted evidence of the existence of ammonia in the breath was obtained. The post-mortem examination showed a compacted condition of the lungs and of the vessels of the stomach.

5*th Experiment.* SULPHATE OF SODA.—I removed the kidneys from the dog used before in the corresponding experiment, and 3 hours afterward injected 60 grains of sulphate of soda, dissolved in 4 ounces of water, into his circulation. Convulsions came on in 3 hours and 20 minutes, and lasted about two hours, when stupor supervened, and the animal quickly died. There was no vomiting. No post-mortem examination was made.

Judging from the foregoing experiments, I think that Frerich's theory of uræmic intoxication is erroneous. In neither of the cases in which urea was injected into the circulation was any ammonia detected in the breath, vomited matters, or contents of the stomachs of the animals. Without pretending to question the accuracy of Frerich's statement relative to the discovery of ammonia in his experiments where urea was injected, I am of opinion that its presence was accidental, and that it is not to be regarded as an invariable attendant upon the retention of urea in the system.

Removal of the kidneys would seem to exercise a very important influence over the action of substances which, when introduced directly into the blood of sound animals, are not capable of causing death, or even of producing much constitutional disturbance. Thus, of ten animals experimented upon in the first series, but one (that in which nitrate of potash was injected) died, while all of the second series were attacked with convulsions and sank after a few hours. It is seen, therefore, that carbonate of ammonia is not more poisonous than the other substances used, and not so much so as nitrate of potash.

The condition of system remaining after extirpation of the kidneys is, in many respects, analagous to that present during Bright's disease. In the latter condition the kidneys act imperfectly, and many substances which should be eliminated are retained in the organism. In the former there is, of course, no excretion of matter through these channels. In all cases, so far as I am aware, where the kidneys of animals have been extirpated and urea injected into the blood, death has supervened in a much shorter time than would have been the case had no urea been thus introduced into the system. I see, therefore, no great difficulty in ascribing the condition known as uremic intoxication to the direct action of an excessive accumulation of urea in the system.

The fact that urea in large quantity has been found in the blood of persons suffering under Bright's disease, but in whom no symptoms of blood poisoning were present, is no argument against the correctness of this view, for, doubtless, as with most other poisons, all persons are not alike sensitive to its action. Moreover, when the disease progresses slowly, the rate of accumulation of urea is also slow, and thus the system by becoming in a manner habituated to its presence, may be enabled to endure an excess without symptoms of intoxication necessarily attending.

I conclude, therefore, from the foregoing experiments—

1st. That urea, (simple and combined with vesical mucus,) carbonate of ammonia, and sulphate of potash, when injected into the blood-vessels of sound animals, do not cause death.

2d. That nitrate of potash, when thus introduced, is speedily fatal.

3d. That death ensues from the injection of any of the foregoing named substances into the circulation of animals whose kidneys have been previously extirpated.

4th. That in neither case does urea, when introduced directly into the circulation, undergo conversion into carbonate of ammonia.

[*North American Medico-Chirurgical Review.*

# EDITORIAL AND MISCELLANEOUS.

## Course of Lectures for 1858.

Though it is some two weeks previous to the commencement of the course of lectures in the Atlanta Medical College, a number of students have already matriculated, and the prospect for a large class is very flattering. The dome and other improvements upon the College building are rapidly drawing to a close, which will make it one of the most imposing structures of the kind, as well as one of the best adapted to the purpose, in the whole country.

## Bibliographical.

We have received "Outlines of a course of Lectures on the Principles and Practice of Surgery," delivered by E. Geddings, M. D., Prof. of Surgery in the Medical College of South Carolina. Prepared by Thos. S. Waring, M. D., and Samuel Logan, M. D., from notes taken during the course. Published with the consent of, and revised by, Prof. Geddings. Charleston: S. G. Courtenay & Co. The mere title, "Geddings' Lectures on Surgery," would be a sufficient recommendation of this work, as there is no one more favorably known to the profession, particularly in the South, for sterling worth and practical good sense than Prof. E. Geddings, of Charleston. It is a most excellent publication, and reflects great credit upon the young gentlemen, Drs. Waring and Logan. It abounds in practical truths, to the exclusion of contested theories—a feature which should highly recommend it to students and young practitioners. To those who have attended, or expect to attend a course of lectures in the South Carolina Medical College, it is invaluable.

The mechanical execution is highly creditable to the publishers, Messrs. S. G. Courtenay & Co., Charleston, South Carolina.

We have received from the publishers, Messrs. Blanchard & Lea, of Philadelphia, Plates illustrative of Wilson on "Diseases of the Skin; 4th edition."

This work is most admirably and beautifully gotten up, and contains 19 plates, embracing the "Structure of the Scarf Skin," "Anatomy of the Sensitive Skin and Nail," "Anatomy of the Sebiparous Glands," "Anatomy of the Hair," "The Acarus Scabiei, or Itch Animalcule," "Structure of Warts and Corns, together with some diseases of the Sebiparous Glands," "Congestive Inflammation of the Derma, comprising Urticaria, Rubeola, and Erythema," "Effusive Inflammation of the Derma, comprising Pemphigus and Rupia, Herpes and Eczema," "Suppurative Inflammation of the Derma, Impetigo and Ecthyma," "Depositive Inflammation of the Derma, Lichen, Strophulus and Prurigo," "Squamous Inflammation of the Derma—Lepra, Psoriasis, Pityriasis," "Lupus non Exedens," "Diseases of the Hair-Follicles and Hairs—Acne, Sycosis, Favus, Trichosis," "Ex-anthematous and Papular Syphilitic Eruptions."

This, as well as the large text, which it is intended to accompany, we would commend to the profession, especially to the junior practitioner, who is so often at a loss to determine the true character of skin diseases.

In addition to the above, we have also received from the same publishers, Messrs. Blanchard & Lea, Philadelphia, too late for notice in the present number, a new and enlarged edition of "Dunglisons Medical Dictionary," "A Manual of Medical Diagnosis, being an analysis of the Signs and Symptoms of Disease, by A. W. Barclay, M. D., &c.;" also, "Miller's System of Obstetrics." All of which will be noticed at length, so soon as we shall be able to give them the proper attention.

We have also received "*Life;* its relations, animal and mental, an inaugural Dissertation by J. Dickson Bruns, A.M., M.D., Charleston, S. C.; and an *Essay* on prolapse of the Funis, with a new method of treatment, by T. Gaillard Thomas, M. D., Physician to the Demilt Dispensary, New York City, read February 3d, 1858, before the New York Academy of Medicine.

## Annual Address before the Medical Society of Geo.

The Annual Address before the Medical Society of Georgia was delivered by Prof. Thos. S. Powell, of the Atlanta Medical College.

The subject of the address was, the "Obstacles in the way of the advancement of the Medical Profession," which were stated by the speaker, as mainly, *selfishness* and *indolence.*

These difficulties were strikingly set forth, and were clearly exhibited as greatly interfering with the harmony and progress of the profession.

Altogether, the address presented a high moral tone, and abounded in liberal and enlarged views, highly creditable to the speaker.

## Med. & Surg. Reporter.

From the card below, it will be perceived, that the Medical and Surgical Reporter has been removed to Philadelphia.

It is one of our very best exchanges, and in seeking a wider field, we shall expect for it an enlarged success:

"BURLINGTON, N. J., April 1, 1858.

From this date the MEDICAL AND SURGICAL REPORTER will be issued *from Philadelphia*, and *Wm. B. Atkinson, M. D.*, of that city, will be associated with the undersigned in the editorial management of the work.

The *publishing department* will be in the hands of Mr. *J. W. Bradley*, 48 *North Fourth St. Philadelphia.*

All communications, books, &c., should be directed to the editors, care of Mr. Bradley.

☞ *Exchanges* will confer a favor by announcing the above change.

S. W. BUTLER, M. D."

## Oglethorpe Med. & Surg. Journal.

We have received the first number of the Oglethorpe Med. and Surg'l Journal, edited by H. L. Byrd, M. D., Prof. of the Principles and Practice of Medicine, in Oglethorpe Medical College, and Holmes Steele, M. D., Professor of Obstetrics and Diseases of women and children, in Oglethorpe Medical College.

This is a bi-monthly Journal of sixty-four pages, and is furnished to subscribers at $2 per annum, in advance.

"All communications intended for publication should be addressed to H. L. Byrd, M. D., Savannah, Ga., to whom, also, all moneys for subscription may be sent."

As we learn from the Journal, the issue at this time is the redemption of a promise made to the public about a year ago.

The Journal is highly creditable in its appearance, and contains a large amount of valuable and interesting matter.

We place it with pleasure upon our exchange list.

## Medical Society of the State of Georgia.

The Society assembled at 11 o'clock in the town hall, in the town of Madison; was called to order by the 1st Vice-President, Dr. H. F. CAMPBELL of Augusta.

The following regular members present: W. T. Hollingsworth, W. S. Meiere, Jos. P. Logan, A. Means, J. G. Westmoreland, M. H. Oliver, John W. Jones, T. C. H. Wilson, Thomas S. Powell, V. H. Taliaferro, G. L. McClesky, Henry F. Campbell, Eben Hillyer, J. N. Simmons, Juriah Harris, E. E. Jones, D.W. Ford, S. G. Anderson, Wm. L. Jones, J.T. Banks.

The minutes of the last annual meeting held in Augusta, April 8th, 1857, were read and approved. The rules were suspended, and, on written application, the following gentlemen were duly elected members of the society: Drs. R. T. Pulliam, A. J. Shaffer, J. N. Coe, L. I. Green, A. M. Parker, Isham A. Ragan, I. H. Conoly, F. S. Colley, S. J. Saffold, L.

T. P. Harwell, L. G. Anderson, J. M. Boring, S. H. Dean, R. J. Stewart, S. H. Smith, L. S. Means, A. M. Boyd, W. F. Westmoreland, H. W. Brown, B. M. Smith, A. S. Walker, Wm. H. Philpot, Wm. B. Crawford, Gasby Knight.

The election of officers being next in order, the ballots were ordered, and the following gentlemen were elected for the ensuing year: Dr. Jos. P. Logan, of Atlanta, President; Dr. H. J. Ogleby, of Madison, 1st Vice-President; Dr. John T. Banks, of Zebulon, Pike county, 2d Vice-President; Treasurer, Recording and Corresponding Secretary, Dr. Eben Hillyer, of Rome.

On motion, a committee of two were appointed to conduct the President elect, Dr. Jos. P. Logan to the chair. Which being done, he returned his thanks to the society in a few appropriate remarks for the honor conferred upon him.

Dr. E. H. W. Hunter, of Louisville, was, by ballot, elected Orator, and Dr. G. L. McClesky, Alternate, for the next annual meeting.

The selection of delegates to the American Medical Association being next in order, a committee of five—consisting of the following gentlemen: Drs. Ford, Harris, Westmoreland, Simmons and Boyd—were appointed by the Chair to nominate them and report at their earliest convenience.

Society then adjourned until 2 o'clock P. M.

*Afternoon Session.*—Secretary called to order by the President.

Dr. Hillyer, by appointment, read an Essay upon the Physiology of Menstruation.

The Committee appointed to nominate delegates to attend the next meeting of the American Medical Association, to be held in May next, at Washington City, reported the names of the following gentlemen as delegates: Dr. J. Harris, of Savannah; W. T. Hollingsworth, of Morgan; F. S. Colley, of Walton; W. G. Bulloch, of Savannah; H. F. Campbell, of Augusta; A. M. Boyd, of Cave Spring; Eben Hillyer, of Rome; B. M. Smith, of Atlanta; R. T. Pulliam, of Atlanta; J. M. Simmons, of Griffin; T. S. Powell, of Atlanta; C. B. Nottingham, of Macon; R. Q. Dickerson, of Albany; E. M.

Pendleton, of Sparta; Jas. Green, of Macon; J. T. Banks, of Zebulon.

Dr. Meiere, by appointment, read an interesting paper upon the Use of Alcohol in Typhoid Fever.

Society then adjourned until 7 P. M., to hear the annual address, by Dr. T. S. Powell.

*Evening Session.*—Society called to order by the President.

Dr. W. F. Westmorland moved that the mode of appointing Essayists be changed. That they be allowed to write upon upon any subject of their own selection. Which motion was carried.

Upon motion, Drs. Campbell, E. Jones, Oliver, W. F. Westmoreland and Dean were appointed by the Chair a committee to appoint Essayists for the next meeting.

The report of the late treasurer, Dr. Nottingham, was received and adopted.

A ballot was ordered to determine upon a place to hold the next annual meeting, which resulted in the election of Atlanta.

Dr. J. G. Westmoreland moved that the society have published, in pamphlet form, two hundred copies of the constitution, by-laws, code of ethics, etc., of the society.

Dr. Meiere offered as a substitute, that the medical journals at Savannah, Augusta and Atlanta be requested to publish in their columns the constitution, by-laws, etc., of the society, which was adopted.

The Committee on Essays reported the names of the following gentlemen to contribute essays upon any subject of their own selection to the society at the next annual meeting: Drs. H. W. D. Ford, H. F. Campbell, Dr. Smith of Griffin, E. Hillyer, Dr. Stewart of Pike county, G. B. Knight, S. H. Dean, W. F. Westmoreland, E. W. Doughty, J. Harris, J. G. Howard, R. D. Arnold, V. H. Taliaferro, Jos. A. Eve, A. M. Boyd, Jos. P. Logan, H. W. Brown, J. M. Green, T. B. Ford, G. L. McCleskey.

On motion of Dr. Means, it was requested that any gentleman who desired to report the history of any interesting case, or other communication, would do so, and the society would be glad to receive it.

The following communication was received from a Committee appointed by the Faculty of the Savannah Medical College, to ask the co-operation of the society, in having the laws forbidding dissections, repealed or modified, and a law passed legalizing dissections:

*To the President and Members of the*
*Medical Society of the State of Georgia:*

Gentlemen: We, the undersigned committee, have been appointed by the Faculty of the Savannah Medical College, and instructed to confer with you, asking your concurrence in a movement having for its object the passage of a law, by the legislature of Georgia, legalizing dissection for the purposes of medical and surgical study.

To effect this great object, we would most respectfully solicit the society to unite with us in a petition to the legislature at their next session to pass an act rendering it lawful for the professors and teachers in medical colleges and schools in this State, to receive, for anatomical study, the unclaimed bodies of persons dying at public hospitals and other kindred institutions. Such a law is in force in other States.

Accompanying this will be found a copy of the statute enacted by the legislative assembly of the State of New York.

The New York law concedes, as you observe, very little else than the single point of legalizing dissection; even this may be of immense practical service by ridding us of the annoyance to which we may at any time be exposed, whilst the possession of a dead body, even for scientific purposes, is, according to the existing laws, equivalent to a crime to which evil disposed persons might at any time call public attention.

Is it not the bounden duty of the State to see that the medical profession of the land, who are the true missionaries to suffering humanity, lack nothing needful for their efficiency and usefulness, without the necessity of going out of the State to obtain this knowledge, not forgetting that it is the profession alone that can be brought to bear on the waste of human life?

The public demands that the Medical Institutions shall furnish it with good and accomplished surgeons, yet it has set its face against the only means of obtaining them. But, at the present time, under its present prosperity and attainment—there is that advancement made in other branches of learning and science—there is that enlightened policy in legislation upon all matters of general interest and improvement, that we *have a right* now to expect, and to ask for some measure, some means, whereby we can procure material for dissection in some legitimate manner, that we may be enabled to make that progress and advancement in our profession, that will raise it to that rank and standard it so nobly bears in other sections of our land—we wish to be relieved from this false and dangerous position, that affixes upon us the stigma of felons in the acquisition of anatomical knowledge, and all these difficulties and excessive annoyances under which we are laboring, and which we are now obliged to encounter and overcome to make that progress and advancement in our profession, that operates only to favor our more faithful discharge of duty.

This is not for the exclusive advantage of the medical man. It seeks no other benefit than that it wishes all others to enjoy. It is for the common good. Every intelligent man, whether professional or non-professional, cannot but admit that the interest of society imperatively demands the study of practical anatomy. Then, why should not the State make suitable arrangement by law.

Is there any reason why we should stand in this matter behind New York, Massachusetts, Michigan, and many other States in an enlightened policy, considering the rights of the medical profession in the just and proper estimate of its value, and in comparison with the privileges that are extended to it in other States.

Let there be removed from our statute books those laws repressing the study of science—laws that should exist only in darker ages, that now put a barrier in the way, almost ruinous to the pursuit of anatomical investigation, and continually threatens and exposes us to a most disgraceful and ignominious punishment. We would prefer securing the passage of a more liberal law than that of the New York act, so that if our views on the subject accord, any petition your honorable body may think proper to make, calculated to facilitate the passage of a bill through the legislature, would meet our hearty concurrence.

WM. G. BULLOCH, M. D.,
R. D. ARNOLD, M. D.

On motion of Dr. Harris, the professors of anatomy in each one of the Medical Colleges in the State were appointed a committee to confer together, and adopt the best means to carry out the object proposed in the above communication, and also desiring them to petition the legislature upon the subject.

Dr. Taliaferro offered the following, which passed:

*Resolved*, That the thanks of the Society be tendered Col. C. R. Hanleiter, of Atlanta, Editor of the National American, for his presence on this occasion, and for the interest he has manifested in the elevation of medical science, by the exclusion from the columns of his paper, of the advertisements of all quack medicines, secret remedies, criminal drugs, &c., which too frequently pollute the public press.

The following, by Dr. Dean, was passed:

*Resolved*, That the thanks of this Society be tendered to the town authorities of Madison, for the use of their hall; to the trustees of the Presbyterian Church for the use of their church building; to the physicians and citizens for their courtesy and attention to the members of this Society.

Dr. Harris read the following communication from Dr. Arnold, of Savannah:

"SAVANNAH, April 11th, 1858.

*To the Officers and Members of the*
*Medical Society of the State of Georgia:*

GENTLMEN—My engagements with the Savannah Journal have prevented me from fulfilling the appointment of the Society, in writing an article on the Pathology and Treatment of Yellow Fever. I think I can do the subject more justice in carrying out the plan I have formed, of giving in successive numbers of that Journal a full history of our terrible epidemic of 1854, for which my notes taken at the time are ample. I respectfully request to be discharged from the further consideration of the subject.

Respectfully Yours, &c.,
R. D. ARNOLD."

The request was granted.

On motion, the following was passed.

*Resolved,* That this Society do now adjourn, to reassemble in the City of Atlanta, on the 2d Wednesday in April, 1859.

EBEN HILLYER, M. D., *Secretary.*

## Journal of Materia Medica and Pharmaceutic Formulary.

We have received from Messrs. Tilden & Co., New Lebanon, Columbia County, N. Y., the Journal of Materia Medica and Pharmaceutic Formulary, the object of which will be found stated in the article below, taken from its pages:

"To Physicians and Apothecaries.—It is with much pleasure we again issue our Journal, enlarged in size and with a new title. The encouragement which our plan has received from the medical profession has suggested this change. We shall give a greater amount of original and selected matter, and make it a practical Journal of Materia Medica and Pharmaceutic Formulary. Each number will contain one or more articles upon those plants which are directed for medical use, embracing a botanical description, its natural history, and chemical and medical characteristics, with a circumstantial detail of their respective virtues and the diseases in which they have been most successfully employed by different authors—communications from physicians, notices of new preparations, all discoveries of new properties in remedies now in use, articles from Medical and Pharmaceutical Journals of interest to the profession, and particularly formulas for pharmaceutic preparations, valuable to the physician and apothecary.

Practitioners will always find its columns open to all communications upon subjects of interest to the profession, and are solicited to communicate their personal observations and experience in the use of any plants or remedies new or interesting.

We shall expect to issue the paper every month, and our terms will be 25 cents per year, or for 12 numbers, which may be remitted in postage stamps. All old subscribers will be regularly supplied.

*Paris Hospitals.*—The care of the sick and the alleviation of their sufferings are duties of which no great society can be unmindful. Poverty and disease always work beneath the skirts of prosperity in large cities. Humanity suggests attention to their claims; security demands it, if only in the interests of public health. We have lately afforded an appreciation of the numerous institutions, the liberal funds, and the devoted services, which private generosity places at the disposal of the pauper sick of London. Documents recently published afford the means of a like analysis of the charitable resources of Paris. This we shall attempt, from time to time. Sixteen hospitals permit the reception of 7,000 diseased persons at the same time in that city, while they employ the energies of 67 physicians and 38 surgeons, the most illustrious members of the medical body. Fifteen dispensers, 179 house surgeons, and an army of dressers, are here engaged in the same sacred duties with their seniors. In addition to these, there are employed in these hospitals 22 chaplains, 774 nurses, and 409 general servants. The annual expense amounts to 5,500,000 francs, and more than 100,000 patients are annually admitted. The impressive vastness of these figures enforces thought. The splendid munificence of such a system must be admired. The mercy which makes so vast a concession to the cure of the wounded is of a quality not strained:

> "It droppeth as the gentle rain from heaven
> Upon the place beneath: it is twice blessed—
> It blesseth him that gives and him that takes."

The devotion of the most illustrious of our brethren to this holy labor earns for the class whom they represent a proud title to esteem, whilst it brings with it the enviable consciousness of a high duty well performed. Such charity is nobility's true badge. But the philanthropist is here also a patriot. No one can say how much of the longevity in great cities is due to the separation of the sick from the healthy. A little leaven leaveneth the whole. An infinitely smaller number of sick may well become centres of wide spreading circles of disease. The state, too, suffers, wherever disease becomes endemic, or when its ravages are feebly or unskillfully strayed. The deterioration of race—the degeneracy of physical power—the enfeeblement of body, at least, which necessarily result, inflict an economic loss. Every case of preventible disease presents a public loss. So also does each case of neglected illness or prolonged convalescence in the laboring man; for

> "Infirmity doth still neglect all office
> Whereto our health is bound."

Thus medicine claims a position in the calculations of the political economist, and the physician rises to the highest rank amongst practical statesmen.—*London Lancet—Virginia Medical Journal.*

ATLANTA
Medical and Surgical Journal.

VOL. III.] JUNE, 1858. [NO. X.

# ORIGINAL COMMUNICATIONS.

## ARTICLE 1.

*Address—Introductory to the Fourth Course of Lectures in the Atlanta Medical College.* By W. F. WESTMORELAND, M. D., Professor of the Principles and Practice of Surgery.

GENTLEMEN OF THE MEDICAL CLASS:

I have been selected by my colleagues to welcome you to our halls; and while I deeply feel the compliment thus conferred, I no less feel my inability to give such a greeting as I would have you receive—such as would have been extended, had some other member of the Faculty been selected. Should I fall short of your expectations, and fail to give you that warm and cordial greeting which you, of right, should expect, do not attribute it to an absence of a proper feeling upon my part, for my heart is this hour full to overflowing with that unspeakable welcome, which I know swells the breast of every member of the body I represent.

Although we meet many of you to-day for the first time, yet we do not meet you as strangers, but as brothers—co-laborers in the same great work, with one mind, one hope, one aspiration; and as such, welcome you to our halls, our hearts and our homes. But a few days ago the most of you were surrounded by kindred and friends, in the full enjoyment of the precious privileges of the family circle. With a mother's prayer and a father's blessing, you left the paternal roof, and are here to-day to link your destinies with ours. Think not then, gentlemen, that you are as strangers in a strange land, but be assured that you are among those who heartily greet your coming, and welcome your arrival with the best feelings of their hearts. Yes, you are in the midst of those who will leave nothing undone during your sojourn in our city, that will contribute to your comfort or happiness; and who, we hesitate not to say, will be to you as father and friends, rejoicing with you in your success, and sympathizing with you in your troubles; and if need be, rest satisfied, will watch at your couch in the hour of affliction.

We receive you as devotees to a noble profession, and to-day consummate ties, which, we hope, will ever after be reverted to, by all, with feelings of pleasure. To those whom we meet to-day for the first time, let me again assure you of our kind intentions. We feel complimented by your choice, and hope that our intercourse for the ensuing four months, will tend to increase, rather than lessen, that confidence which has honored us with your preference.

To those of you, whose faces are familiar, and with whom we had the pleasure of laboring the past session, it is unnecessary for me to say welcome; you know our hearts, and are well apprised that our every energy has, and will continue to be, exerted for your advancement. By your return to our Institution we feel highly complimented. It is certainly a token of your regard, and an evidence, too, that your confidence has not been lessened by that intimate relation which we sustained during the past summer.

The labors which commence with this hour, and which are to continue four months, are both to student and teacher, arduous and responsible. That we may have some idea of the responsibilities which surround us, let us, for a moment, glance at the position of both—the responsibilities which the teacher assumes, and those which must necessarily surround you as physicians.

The position of a public teacher of medicine, is one of more responsibility than you would at first imagine. Did a want of success in imparting information, alone affect the teacher, the responsibility would by no means be so great; but a moment's reflection will convince all, that it is the student, and not so much the teacher, that is injured. It is here, gentlemen, that you have come to receive instruction in the various branches of the medical science; your presence here is an evidence of your confidence in the present faculty: should we betray that confidence, teaching you false and dangerous doctrines, or leave untaught important truths, we would not only be doing you a very serious wrong by affecting your prospects as physicians, but, perhaps, thousands committed to your hands would be made to suffer by the error. The position, then, is one of great responsibility—one from which there may result very great good, or a corresponding evil—the good or evil, as before suggested, not being alone confined to you as physicians, but extending itself to those who may honor you with their confidence. With such feelings in regard to our position, let me assure you, that every member of this faculty will do all in his power to impress you with those great principles in medicine, which are to direct you in the hour of trial.

But, gentlemen, you too have your responsibilities—your part to perform, and without its faithful performance, our labors, however assiduous, must fall far short of the great object to be attained. No one of you, I hope, has adopted our noble profession without a comprehensive view of the great responsibility which necessarily attends it. With a proper appreciation of the position that you must necessarily occupy as physicians, there is not one of you but must be spurred up to duty by the thought of that remorse of conscience which must result from a feeling of incompetency at the bedside of a dying patient.

In a few months, the lives of many of your fellow beings will be placed in your hands. The father, mother, child, and in fact, the whole community in which you reside, will turn to you for assistance and advice in the hour of affliction. Imagine the mother weeping over her tender and innocent babe—the wife over the prostrate husband and father, the only hope and support of a doting family; or a husband kneeling by the side of a loving wife and mother; upon your skill depends the happiness or misery of that family. Every eye is turned to you as their physician and deliverer. Your every gesture and change of feature or expression, is watched with intensity, to see, if possible, some change upon which to build a hope. You will be called upon, too, in such tones of agony and supplication, as will almost unnerve you for the emergency. This, gentlemen, is no imaginative sketch, but stern reality—scenes through which you must all pass. Say, then, that in such an hour you should feel your incompetency, and feel, too, that it was alone the result of a want of application upon your part, and the picture is complete. Your feelings under such circumstances I shall not attempt to depict—may it never be your fortune to realize them. Let me beseech you, then, to leave nothing undone that will tend to prepare you for such trying scenes. You may not notice or care for misspent time now, but the day will surely come when you will look back with regret upon every hour that has been squandered during your professional studies.

Again, let me assure you, that we shall leave nothing undone that we think will tend to advance your interests, and if we see upon your part the same manifestation, which I feel confident we will, our labors, however arduous, will be made pleasant.

As your presence here to-day is an evidence of your intention to unite your destinies with ours, it is certainly right and proper that you should, at this hour, hear something of the policy of the Institution with which you propose to connect yourselves. And this has been made doubly necessary by the fact, that many of you have heard conflicting statements in regard to the principles which direct us—statements which were known to be erroneous, but concocted and set afloat with the view of blasting our prospects.

Since the organization of the Atlanta Medical College, the greatest ambition of the Faculty has been to furnish advantages to medical students equal to those found in any other

Institution in the land; and not only this, but to establish the highest standard of requisitions for graduation which has, or shall be adopted and conformed to, by the medical colleges of the United States. But, notwithstanding this, and our efforts in many other particulars to forward the interests of the profesison, there are some, who by vain boasting, supercilious sneers, and in many other ways no less discreditable, have attempted to bring us into disrepute.

Yes, there are some who, from our infancy, have attempted our overthrow, and still continue their blows, but thanks to truth, justice, and a discriminating public, every blow that has been hurled at us, has recoiled upon our adversaries, and if facts and numbers are to be relied upon, they, and not us, have been the sufferers.

It is true, that the number of our adversaries is small, and daily, growing less; but, bitter, unscrupulous and uncompromising; and, therefore, we think it not amiss to investigate the pretended cause of this opposition, and to lay our position fully before you.

It would appear that our only sin is the *season of the year* that we have selected to hold our sessions—that in every other particular, we are all that they could desire.

Before attempting to discuss the objections urged against us upon this score, one word in regard to the feelings which we fear have prompted this opposition.

From whence do objections come? Principally, I regret to say, from a medical school in our own sunny South—from those with whom we come in direct competition, and who never until the *success* of the Atlanta Medical College was a fixed fact, saw anything wrong in summer teaching, although quite a number of summer schools had been in successful operation for a series of years—schools, too, with two annual sessions. If it is the principle they combat, why, I ask, have they never made issue with the summer schools of the North, of the existence of which, they were certainly not ignorant. Is it less objectionable in the northern States than in Georgia?

No, gentlemen; but summer schools in the northern States do not conflict with their interests.

But to the objections that have been urged against summer teaching.

First, that we cannot teach Anatomy in summer. We deem it unnecessary to say much upon this subject, as many of you have, within the past two weeks satisfied yourselves upon this point, and as all will, during the session, have an opportunity of investigating for themselves.

It is evident that those who urge this as an objection, have never visited the Atlanta Medical College during the Session.

With a large and well ventilated dissecting room, and anatomical material carefully prepared during the winter months, and stored away in alcohol, dissections, all admit, who have tried it, are equally satisfactory, and much more agreeable than upon the green subject in a necessarily heated and confined atmosphere during the winter months; and before the close of this session, I am confident that you will all bear me out in this, that we can teach Anatomy as perfectly in the summer, as at any other point, North or South, during the winter months.

Again, it is urged by those who are ever prating about medical reform, and the elevation of the standard of medical education, and whose reforms consists alone in words, as will be seen hereafter—that we shorten the time of study by summer sessions, and in this way lower the standard of medical education. They tell us that the student loses, by this plan, six months office study, which they consider essential to his qualification, and without it, (*and it must come between the two courses of lectures,*) he can never be worthy of the degree of Doctor of medicine.

How, I would ask, is it possible for us to shorten the time of study, if the published requisitions for graduation are strictly observed? If you will look over the announcements of the various medical schools you will find the following as one of the requisitions: "The student must have been engaged in the study of medicine three years under a competent instructor, &c." Some have, of late, inserted "the usual time," instead of three years. But, it will be asked, what school observes this requisition? Not one, I will answer; not even those who profess to feel so much in regard to time, and who contend that an interval of six months between the courses should be made a requisition.

However anxious they may be to extend the time of study, between the courses of lectures, they are not willing to observe this, their own published requisition, the only means, as all will admit, of making uniform the time of study.

To show you the feelings of even those who profess to feel so much concern in regard to time, I hope I will be excused if I here repeat a proposition that I made two years ago, to the *then* Dean of a flourishing institution in an adjoining State —an institution, if we judge alone by her many words, first in all medical reforms. In a conversation upon this subject, with the Dean of that Institution, he was rather violent in regard to time—objecting to summer teaching, upon the ground, that the student might, by this means, graduate a few months earlier than by the system of exclusive winter teaching. During the conversation, I remarked, that the Atlanta Medical College was disposed to take as high ground upon this subject as any other Institution in the land; and as an evidence that we were disposed, and would do anything to extend the time of study, that the Faculty of the Institution with which I was connected, would pledge themselves that no student should graduate, or be admitted to examination, who did not give satisfactory evidence of having been engaged in the study three years—the full extent of the time usually specified in the requisitions for graduation—if the school of which he was Dean would do the same.

The gentleman was not prepared to accept such a proposition, and that was the last of it.

Here is the evidence of what I asserted a moment ago, that the great pretensions, of those who oppose us, to medical reform, and the elevation of the standard of medical education consists alone in words—that when they are asked to come up to their own published requisitions, the only means of overcoming that feature of medical education, which they appear to think the most objectionable, they are not prepared to do so.

Say not to me, then, that they have alone the elevation of the profession at heart. I fear there are other motives—motives which I will not mention, but leave you to infer.

I stated a moment ago, that an interval of six months between the courses was made a requisition by those who oppose us—that without this interval, the student was not admitted, although he might have been engaged in the study of medicine three, five, or even ten, years.

There is something wrong here. They assure us that their great object is to lengthen the time of study; and here you see they admit students to become candidates who have only been engaged in the study of medicine fourteen months, and reject the application of others who have pursued the same course for three, five, or even ten, years. I would ask is this a reform? What difference does it make, when the courses of lectures are attended, whether winter or summer, with interval, or without interval, if the student, after a thorough examination, is found *worthy* of the degree.

And what of this interval of six months that is considered of such vital importance to the student—*of more importance than an unlimited period of study at any other time.* It is, I assert, regarded by the majority of students, as a kind of vacation, and I am confident that I will, by preceptors, be borne out in the assertion, that quite the majority of medical students, are less familiar with what is usually taught in medical institutions, when they return to college after the six months interval, than when they left it.

It has been asked, time and again, why this Institution adopted the summer instead of the winter months, to hold her sessions. I would state, that for a time after the organization of the Institution, the Trustees and Faculty were undecided as to whether they would make it a summer or winter school; but, after passing in review the wants of the State, and of the whole South, were unanimous in their decision in favor of the summer months.

One fact which did much to influence them in the adoption of summer sessions, was, that numbers of young gentlemen from the South were annually found in the summer schools of the Northern States.

However much they might have preferred to have remained in their own native South, from the absence of any summer school in the Southern States, they were forced to leave their homes to mingle with those whose sympathies were by no means in unison with their own, and whose taunts and insults to Southern Students have so often resulted in unpleasant and humiliating consequences.

Yes, Gentlemen, the summer months were adopted, to place the South upon an equal footing with the North—to give *Southern Students* an opportunity of attending lectures in a *Southern school*, during the summer months.

The Atlanta Medical College is the only summer school South of "Mason's and Dixon's Line," and if we are not mistaken, the only summer school in the United States, with but one session annually.

A summer school, before the organization of this Institution, was certainly a *desideratum* in the South; if there was no other evidence of the fact, our unprecedented success abundantly proves it.

Our peculiar location was another inducement to the selection of Summer sessions, as the four months that we hold our sessions, are as healthy, if not the healthiest, four months in the year. Situated, as Atlanta is, upon a spur of the Blue Ridge—the elevation dividing the waters of the Gulf and those of the Atlantic—with an altitude of eleven hundred feet above the sea, without rivers or other local causes of disease, I have no hesitation in asserting that it is the most Southern healthful region to be found in the United States. Surrounded by all that is conducive to health, the student may feel as secure from disease in Atlanta, as he would upon the loftiest peak of the Look-out.

Those formidable epidemics which occasionally so rapidly depopulate our sister cities, need never be feared in Atlanta, as Cholera and Yellow Fever never originate, nor can be propagated, in this favored region; cases of both having been brought to our city, and failed to extend to a single individual. But, if this is not sufficient to convince all of the healthfulness of our city, let the bills of mortality be consulted, and it will be found that, notwithstanding the number of hands employed in the several machine shops in the city, the mortality of Atlanta does not exceed one and a-half per cent., including rail road accidents.

These are some of the reasons which induced us to adopt Summer session, and we have never, for a moment, regretted our course, as our success is the best evidence that it is endorsed by the profession, notwithstanding the great effort that has been made in certain quarters, to misrepresent our motives.

For more than twelve months the subject of medical education has elicited unusual attention; all, as it would appear, feeling that something must be done to raise the standard of medical education—that the adoption of some uniform system that will insure this end, is essential to the well-being of the profession.

The diversity of opinion that has already been expressed in the discussion of this subject, is the most conclusive evidence of the difficulty to be overcome, and the almost impossibility of the suggestion of any uniform system, that will meet with the views and interests of the various sections of this vast extent of territory.

But, if time permitted, I am not disposed to enter the field of discussion, or attempt a review of this important subject; but would be allowed to say that those who propose to insure the qualification of the student by making requisite to graduation, *the simple absurdity*, of an interval of six months between the two courses, and thus relieve the profession of all anxiety upon the subject, must have very contracted views, as has been abundantly shown, or else are actuated by other motives than the good of the profession.

But whatever suggestions may be made that will tend to insure the desired object, will be, as has been before said, with pleasure adopted; or whether there be suggestions or not, the Faculty are determined that no student shall receive the honors of this Institution who does not come up to the standard recognized by the first medical schools in the land. For, after all, an *inquisition* upon the *knowledge* of the candidate, is the *only* way to guard the profession, and is certainly *the only test of qualification.*

Whatever may have been the advantages offered, the student, without the necessary application, can never become qualified to assume the responsible duties of the physician. And if any apply to this faculty without the requisite information, let it be distinctly understood, that they will not *squeeze* in through this Institution—that if such enter the profession with all its honors, the sin shall not be at our door. And, again, if the recipients of the honors of this Institution should ever be found engaged in unprofessional practices—such as would tend to degrade our noble profession, the trustees and faculty reserve the right to revoke the degree, and thus strip the offender who would dare tamper with his sacred calling, of all the honors previously conferred.

We would then say to those who *just now* feel so much in regard to medical reform, come on—"Show your faith by your works," and not attempt by sneers and ungenerous insinuations, to bring your competitors into disrepute.

I might say much more, but hope that sufficient has been said to give you our position, and the principles which direct us; and if I have succeeded in this particular, I am content.

Think not that the Faculty of this Institution are opposed to *true reform*, or the elevation of the standard of medical education. If it is thought best to lengthen the time of study, making it uniform, the Faculty of this Institution will observe it strictly. Lengthen the course of lectures, if thought advisable, to six or even eight months, and add two or more additional Chairs, and in this or any other improvement that will promise the elevation of the profession, we are with it heart and hand. But, let it be distinctly understood, we shall *never* submit to an *attack* under the cloak of reform—which we *know* the present movement to be—let it come from what source it may.

In conclusion, gentlemen, let me again urge you to prepare yourselves for the responsibilities of your adopted profession —the duties of which some of you are soon to assume.

Be not content with the *honors* of this or any other Institution, for *a diploma alone*, can never make you distinguished, or give you fame. If you would succeed, your aspirations must be higher. Let your motto be *onward* and *upward*, and never, for a moment falter, until you have ascended the rugged steeps of fame, and are firmly planted on its summit.

With a fixedness of purpose, and untiring perseverance, you may accomplish almost anything you desire. Onward, then, and ever remember that—

> "Perseverance is a Roman virtue,
> That wins each God-like act, and plucks success
> Even from the spear-proof crest of rugged danger."

## ARTICLE II.

### *Abuse of the Pessary.* By J. S. Weatherly, M. D. Montgomery, Alabama.

Much has been said recently against the abuse of the speculum; and as it seems almost impossible for the profession to get hold of anything without abusing it, I ask your indulgence for a short time, whilst I draw forth another instrument, whose use, I think, has been more abused, and been productive of more injury than the speculum. I refer to the pessary —an instrument coming down to us through the long vista of years, with the habiliments of the ancients clinging around it —sanctified even by the hand of the father of medicine himself, who was said to have used some fourteen different kinds of pessaries. But his idea was not, however, so much the curing of prolapsion, and kindred diseases, by mechanical means, as by medication; for I believe all of his instruments were medicated.

Modern physicians have almost entirely discarded the medicated pessary, (probably without sufficient reason,) and use them merely as a mechanical support; though not a few authors refer to them as curative agents, in the treatment of prolapsion. Meigs devotes some three or four of his letters to this subject. But with all due deference, and high respect for his talents, we must say that three or four pages would have done as well, and made the author more reputation than his long dialogue with Miss H. Blanque. He is, however, very sensible on the subject, when he gets to it, (as he generally is when he gets to the point.) He points out some of the bad effects of this instrument, when it is unsuited to the case, such as ulceration of the vaginal canal, recto vaginal fistula, &c. He also says, that the globe pessary, which he prefers, will frequently not be retained, on account of the relaxation of the vaginal canal, and that recourse must be had to the stem pessary, which it seems to me must necessarily produce more injury from its mechanical irritation, than any advantages that could possibly be derived from its employment.—That they also are well calculated to produce leucorrhœa, ulceration, etc., there can be no doubt. The simple globe pessary, however, it seems to me is less liable to these objections, than any of the others. In fact, in the majority of cases, where they are used, these things already exist, either as effect or cause, and it matters not which, so far as the pessary is concerned, but so far from the pessary curing the prolapsion, if such really exist, it aggravates all of the symptoms.

It does not require very keen conception, it seems to me, to see that any foreign body, constantly in contact with the mucus membrane of the vagina, and the os uteri, is almost necessary compelled to produce changes in the parts, even if they are clear of disease previous to its introduction. And especially is this the case, if there be predisposition to inflammation of the mucous membrane. For instance, a patient applies for medical assistance. She informs you that she has an uneasy feeling in the lower part of her bowels, with pains in her back and hips, and winds up by saying that she thinks her womb is misplaced. (The majority of the sex think that all diseases of the womb consist in a displacement, and in this they have the company of some learned M. D.'s also.) You examine the case, and if imbued with the idea that all uterine diseases are caused from some malposition of the organ, you very readily make out a case of prolapsion. Why? From the fact that it probably does exist to a greater or less extent, as a symptom of some other disease. But if you push your enquiries a little farther, and use your reason as well as your fingers, you will probably arrive at a more correct diagnosis of your case. Even with the fingers you can feel that the uterus is heavier than natural, that the mouth is dilated, and that the lips are puffy and soft, or hard and painful; also, that the vagina is tender, &c. And if you now introduce that HORRID *speculum*, you will perceive the mouth of the uterus looking as rosy as a full ripe strawberry, and probably covered with minute points of ulceration. But suppose, instead of the speculum, you introduce the more elegant pessary, (for it does seem to me that the one is about as indelicate as the other;) do you cure your patient? Most certainly not; but on the contrary, all the symptoms will be aggravated, and you will be forced to remove the instrument. And it matters not what kind of instrument you use—whether globe, disc or stem—all are alike objectionable.

Though the pessary, in some few cases, is no doubt a valuable adjunct, in the treatment of prolapsion, I doubt very much whether it ever cures a case. When I first commenced the practice of my profession, I thought I had, or would have, frequent use for this little instrument. Consequently I procured a fine assortment; and, as a matter of course, I used them as often as I thought a case would admit of one, and probably much oftener than was really necessary. But after studying more particularly the nature of uterine and vaginal diseases, I found that their use was rarely indicated, and that I could treat the majority of cases much more satisfactorily to myself and patients without them, for I can't conceive of any thing more annoying to a female, than to have one of these instruments constantly in her vagina. Again, I found that it was almost impossible to keep one of them adjusted in the vagina of a negro woman. Their duties are such, generally, as to make it very difficult, even if they tried, to retain them in situ.

Among the better class of females, particularly our Southern ladies, whose sedentary habits are constantly predisposing them to uterine derangements, we find prolapsion, when it does exist, more as a symptom, than as a disease, *per se.* And we can cure it by remedying the engorgement, or ulceration, if it exist; not, however, by introducing a pessary, and sending our patients to bed, but by using rational means for subdueing the disease, and giving tone to the relaxed tissues.

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## ARTICLE III.

### *Complicated Case of Obstetrics.* By B. T. SMITH, M. D. Central Institute, Ala.

On the 6th Feb. last, I was called to see Mrs. ———, at whose residence I arrived about 7 o'clock, P. M. From her own statement I found she had been in labor about twelve or fifteen hours. As soon as I could make the preliminary arrangements, I proceeded to make an examination. I found the os uteri well dilated, the liquor amnii still entire. As I proceeded in my examination, I discovered the funis umbilicalis with its steady pulsations; and finally traced it to its origin in the fœtal surface of the placenta, which was then near the right ilium. At once I suspected it would be a case of placenta previa. In a few minutes I made another examination, that I might have a correct diagnosis of the case; and while this was going on, the waters broke and the funis descended. There was no time for hesitation. I saw, I thought, clearly, a case of prolapsus funis, and had labor been brisk, it could not have been otherwise, but fortunately, contractions were going on slowly. I made every effort for the recession of the cord, and in doing so, became satisfied of the proximity of the placenta. In this time the child's head had advanced, and the problem was, which would take precedence. One thing astonished me more than all—there was no hemorrhage.

Firmly fixing in my mind that I would give the advantage to the fœtus, I pressed the placenta, and wished strongly for an assistant, but it was a futile wish. I was nailed to the spot, and though the woman remonstrated—that I was suspending her "misery," yet I persisted, and finally a stronger pain came to my relief, and the fœtal head took possession of the superior strait in advance of the obtruder. As soon as I was satisfied of this, and found the presentation most favorable, I consoled the woman, and let nature take its course. In about forty minutes the cries of a new-born child were heard. No difficulty was encountered in the delivery, except relieving the neck from the envelopes of the cord. At about half-past eleven, the child was given to the nurse. I suffered about twenty minutes to elapse before I attempted to take away the placenta. Making gentle traction on the cord, I brought it out its full length, and came to its insertion in the placenta, which was still within the os uteri. I felt now that there was to be some delay, and I was not disappointed. I waited nearly two hours, making frequent efforts by traction on the one hand, and using means to contract the uterus on the other, but all was abortive. I introduced my hand and found the uterus pretty closely drawn upon the placenta; I grasped the body, and expected to have my hand and it thrust out together. But judge of my disappointment—it refused to come, or even yield. I could have torn it to pieces, but I did not wish to do this. It was firmly attached to the cervix, by what seemed to me a cartilaginous adhesion. Feeling round it gave no pain, but every attempt to break down the adhesion produced intense suffering. At length, by the entreaties of the woman, and my own weariness, having worked seven hours after delivery, I concluded to let a little time elapse. I reclined upon a bed to rest, and perhaps an hour elapsed before I resumed my efforts. And now I found a new difficulty; I could not introduce my hand on account of the contraction of the parts. I applied a ligature, and severed the cord, leaving enough to answer my purposes. I scarcely knew what to do for the best. I gave liberal doses of ergot et bi. borate of soda, if so be, by strong efforts of the uterus, the adhesions might be overcome. In four hours, powerful efforts were produced, and in one of those powerful throes, amounting almost to convulsion, the adhesions were overcome, and the placenta was cast out. And strange to tell, little more hemorrhage than usual in simple cases. I gave a composing draught, and left. The officiousness of the nurse prevented me from examining the nature of the adhesions critically; excepting that two days after there was a suppression of the lochia, which was soon re-established, nothing serious resulted, and the woman speedily recovered.

# SELECTIONS.

## *Observations upon Otorrhœa as a Sequela to Scarlet Fever.* By LAURENCE TURNBULL, M. D., Physician of the Eye and Ear Department of the Western Clinical Infirmary of Philadelphia.

OTORRHŒA, or a chronic discharge from the ear, is one of the most frequent and tedious affections which the physician has to treat. It may properly be divided into two great classes, depending on the nature of the discharge, viz: mucous and purulent. The mucous form arises as a termination of catarrhal otitis, from measles, or whooping-cough. Its chief characteristic is the absence of true pus from the discharge, and its being found much more amenable to treatment than the purulent variety, which we design to treat in this paper. Occasionally we find this second form of discharge difficult to manage in scrofulous patients, when neglected; but if proper counter-irritation be made behind the ear, and great cleanliness of the ear and skin be enforced, with tonics, astringents, and slightly drastic purgatives, it will be found more amenable to treatment than the form depending on scarlet fever. The great importance of attention to this second form of otorrhœa (chiefly the result of scarlet fever,) will be better understood, when I state that it is the chief cause of non-congenital deafness. This is proven by the records of the deaf and dumb institutions, both of this country and of Europe.* An examination of the reports of the cases admitted into the Pennsylvania Institution for the Deaf and Dumb, in the City of Philadelphia, during the last six years, also proves the same fact. In 1852, of the thirty-three pupils admitted, seventeen were born deaf, three lost their hearing by scarlet fever, the remainder from five different causes, and four from causes unknown.

For the year 1853, of the twenty-six pupils admitted, twelve were born deaf, six lost their hearing by scarlet fever.

In 1854, of the forty-seven pupils admitted, thirty-two were born deaf, three lost their hearing by scarlet fever.

In 1855, of the twenty-five pupils admitted, thirteen were born deaf, five lost their hearing by scarlet fever.

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* See Wilde on Diseases of the Ear.

In 1856, "of the sixty-three pupils admitted, 27 were born deaf, 12 lost their hearing by scarlet fever. The large number for 1856 may be accounted for, by the fact that in that year the mortality from scarlet fever in Philadelphia was nine hundred and seventy-two in a population of 500,000, while in 1855, the deaths from scarlet fever were only 163. This fever also prevailed throughout the State as an epidemic, during the latter part of the year 1855 and 56.

Otorrhœa, resulting from scarlet fever, is a disease which, if it becomes purulent and chronic, is very difficult to cure. This, I find to be the opinion of almost every one who has devoted much attention to the subject. Itard* says: "It is of interminable duration, and is one of the gravest diseases of the organs of hearing." Mr. Wilde† remarks: "The most unmanageable cases of otorrhœa which I have met with in practice, in which the most destruction has taken place, and where the ossicula have been most frequently lost, have been the result of scarlatina." In my own practice, one case had existed for thirty-five years, in another twelve years, and a third case, which came under my care, had been more or less under medical and surgical treatment, for seven years. In several other cases, the duration was respectively, one, two, and three years. The most recent cases have been the result of the late epidemic in our city. The profession has not, at any time, been sufficiently alive to the great importance of the treatment of acute inflammation of the tympanum, so as to prevent, if possible, the destruction of the internal portion of the ear, and the subsequent otorrhœa.

If the same amount of care and trouble were exercised by physicians in the treatment of the *ear* as of the throat, a much smaller number of children would be permanently deaf, and a much smaller number would suffer from destruction of the tympanum, or with chronic otorrhœa for months or years after. Having been successful in all my cases, during the late epidemic, in preventing deafness, I will give an outline of my treatment, hoping it may save a few children that important organ, the ear, so adapted to increase knowledge, and delight mankind.

*Treatment.*—In the early stage, when the scarlet fever is at its height, we must endeavor to arrest the acute inflammation of the ear, by depletion, but care must be exercised, as this exanthem will frequently assume a low type, which was the case during the recent epidemic. In such cases, local depletion (by leeches or small cups, to the mastoid process and antitragus) should be employed as soon as acute pain is complained of, and sometimes it will be found necessary to make pressure, as the child may be too young to indicate the point of pain, except by sudden screaming and crying; but pressure at the lower portion of the ear will reveal the cause instantly.

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* Traite des Maladies de l'Oreille et de l'Audition. Par J. M. G. Itard, p. 208.
† Wilde, p. 323.

Local depletion should be repeated at intervals, and in such quantities as the strength of the child will permit, assisted by active purgation by a drastic agent, as jalap, scammony, or senna, in infusion, while, at the same time, we support the child's strength with nourishing diet, &c.

If the case will not bear depletion, or we are called too late, then we must still apply counter-irritation, and purge the patient, but should suppuration have commenced, indicated by a chill, with increased pain, of a darting and throbbing nature, with a sense of bursting in the ear, the meatus, on examination, being of a livid red color, with the membrane of the tympanum red and swollen, our proper plan is to introduce a delicate cataract needle and puncture the membrane. This will liberate the fluid; the purulent matter being pent up in the tympanum, from which it cannot escape through the Eustachian tube, it may ulcerate its passage externally, or may, by its contact, cause destruction of the internal ear, with destruction of the tympanum by rupture, or even extend towards the meninges of the brain, being not only fatal to the organs of hearing, but even to life itself. Cases are on record, in which this ulcerative process has extended, so as to open the carotid artery into the Eustachian tube, causing death from hemorrhage from the ear. Or the extension to the brain may be in the form of effusion or disease of the periosteum and death from convulsions. But instead of this extension your remedies may have prevented death, and the disease may now take on the subacute form attended with a discharge of a muco-purulent or sero-purulent matter The treatment in such cases must be both general and local. The general treatment, which is of the utmost importance, is to improve the blood by tonics of iron, quinine, and cod-liver oil, with the frequent use of the bath, or wet towel, with frictions, and out-door exercise in clear weather. The local treatment should be directed to the throat, by the application of solid nitrate of silver to the region of the Eustachian tube, every third day, with stimulating gargles, and the internal use of weak astringent washes to the ear, while most active counter-irritation should be kept up by blisters, setons, or croton oil, applied over the mastoid region and tonsils. In some of the most unpromising cases the otorrhœa will gradually cease, and the disease may thus be cured; and if the case becomes chronic, then the treatment must be continued for months, and even years, as may be seen by the record of a few cases.

Case I. *Scarlatina, Loss of Membrana Tympani, Deafness, Otorrhœa.—July* 11, 1856. John B., æt. 10, had scarlet fever at the age of three; deafness has ever since prevailed, with otorrhœa on both sides; the external ear in normal condition; meatus, good size; membrana tympani quite gone on right side, while on the left it is thickened with a small opening in its centre.

He is pale, of scrofulous diathesis, with several enlarged cervical glands; nose and throat in an irritable condition. Able to pass air through both Eustachian tubes.

*Treatment.*—After washing and drying out the meatus, and opening in left membrana tympani, it was brushed over with a solution of nitrate of silver every third day, while internally was administered cod-liver oil and ½ grain of sulphate of quinia in solution three times a day; counter-irritation behind the ear by tincture of iodine.

*January,* 1857. After six months' treatment, the otorrhœa on left side is quite gone, and the opening filled up, while the discharge from the right is very slight, unless on exposure to cold air, which is much obviated by the introduction of a pellet of cotton, and avoidance of cold winds. The hearing was so much improved that he was able to resume his school duties, requiring no artificial aid.

Case II.—*July* 22, 1856. David R., æt. five years, had scarlet fever at the age of two years and seven months, membrana tympani in part gone; general health not good, pale, anæmic; cleansing and application of solution of nitrate of silver, with the internal use of sulphate of cinchona, one grain, three times a day; and as a local astringent, gr. v cupri sulphas to ℥j of water; and to moisten the meatus with glycerine, in which was suspended tannic acid.

*Nov.*, 1857. Hearing much improved, and discharge improved. (Case did not return.)

Case III. *Scarlatina, Loss of Tympani, Deafness, Rheumatism with Polypus.—August* 15, 1856. William J. M., æt. 28 years; otorrhœa from both ears; had scarlet fever at the age of sixteen; could only hear the tick of a watch when applied ever the temporal bone; Eustachian tubes both closed; bent almost double with rheumatism; right ear, membrana tympani entirely gone, and no malleus visible; left ear filled up with a polypus, covered with yellow pus, and flowing out over the edge of the meatus.

*Treatment.*—Two grains of iodide of potassium three times a day, with wash of ten grains zinci sulphas, to be dropped into the left ear. After cleansing with cotton, applied solid nitrate of silver to growths, by means of Wilde's caustic holder. Finding, after several trials during August, not much reduction in size, I twisted off portions, at three different sittings, and, as the hemorrhage was considerable, I applied powdered alum, and again used the nitrate of silver to get rid of what was still at the bottom, but found it did not entirely destroy the spongy granulations, after eight months' persevering trial.

*Feb'y*, 1857. Applied a saturated solution of zinci chlorid., on a piece of cotton, by means of the speculum, for three weeks, with the entire contraction of the granulations, so that now, I can see the membrana tympani, and an orifice from which the whole mass of granulations seems to have sprouted, and as I touch the surface, he feels a disposition in his throat to cough. His general health is much improved, being able to straighten himself, and rheumatism gone.

*March*, 1857. Dilated the Eustachian tube by means of Wild's catheter and warm air twice, at two weeks' interval. His hearing is so much improved that he can hear me speak to him at a distanee of six or seven feet. Gradually the membrana tympani closed over, and he was discharged, cured.

This case was one of great interest, and shows the good results to be obtained by persevering efforts, assisted as it must be, by the willing help of the patient, and the use of constitutional remedies.

CASE IV. *Otorrhœa, of twelve years' duration, of both Ears, with Perforation of Membrana Tympani on one side: Improved.—April* 15, 1857. Benj. B. F., æt. 24; a healthy looking young man, of fair complexion and blue eyes. When he speaks, it sounds as if there was some obstruction in the throat or nose. (Blacksmith.) He stated that he had scarlet fever at the age of about twelve, but of a mild character. On getting well, he had more or less discharge from both ears, and was deaf, and although he has been under the care of several physicians, he has become worse, so that he is unable to attend properly to his duties in his father's shop. On examination with Wild's speculum, found the right membrana tympani with a small opening in it, but he was not able to pass air through it, from obstruction of the Eustachian tube; there was also redness of the external meatus; hearing distance one inch; left ear, discharge, with redness, and in places, whiteness of the membrane, but no perforation; able to inflate the membrane on this side; hearing distance three inches. Throat—both tonsils very much enlarged, but not very hard; relaxation and elongation of uvula, with engorgement. Removed uvula, made application of zinci chlorid., in solution, to tonsils, and directed cleansing of the ear by a syringe, and application of solution of zinci sulphas, with vin. opii gr. x to three ounces of distilled water, three times a day. For internal use, syr. sarsap. comp., with gr. j bichl. hydrarg., a wineglassful three times a day, with nourishing diet.

*22d.* Throat of a much better color, and speaks plainer; not much improved in discharge from ear, which annoys him, having to wipe it very frequently through the day, as I directed him to keep no cotton in the ear, but to wash it frequently each day with the wash diluted.

Treatment of throat continued; applied cantharidal collodion below and in front of the ear, with application of x gr. solution of argenti nitratis to ear, with insufflation of powdered alum to throat and nose.

*25th.* Very much improved. Ordered him solution of iodine comp., ten drops three times a day, in infusion of hops.

*May* 16. Finding the Eustachian tube continued obstructed, introduced Eustachian catheter, and gently dilated it with warm air, which produced a feeling of faintness, but which soon passed off. Same treatment continued.

*23d.* Catheter again introduced, no feelings of faintness being produced. Same treatment.

*27th.* Both ears discharge less. Eustachian tube open, the air passing through it into the middle ear, and being discharged from thence outwards, by the perforated membrana tympani. Hearing improved.

*June* 3. Had a slight relapse from catarrh; throat more congested; discharge from ear increased; applied solution to the throat, also mild solution to the ear; directed demulcents to be used.

*20th.* Again improving, but is feeble. Ordered tonics, sulphate of quinine, and cod-liver oil.

*July* 11. Discharge ceased; complains of pain in his head. Ordered blisters behind ears, and an infusion of senna, to keep up action on the bowels, so as to prevent a return of the pain.

*August.* Called again at the infirmary, and informed me he was so much improved as to be able to take his place as superintendent of the shop, and when on a recent visit to the river, he could hear the noise of the steamboats, which he had not been able to do for many years.

CASE V. *Otorrhœa of both Ears of five years' duration, with loss of both Membrana Tympani.*—The result of scarlet fever and measles. Mary T., æt. 8 years, a delicate dark-eyed girl, is deaf in both ears, with great irritation from profuse purulent discharge, the odor from which is very offensive. Has tried numerous physicians without success. After the acute attack, the father was directed by his physician to syringe the ears, every few days, with tepid water, which he continued, until one day the discharge came through the nose, and the child cried out that something had burst, since which time numerous applications have been tried, but with no permanent benefit.

On a careful examination and removal of the profuse secretion by pellets of cotton, I found both membrana tympani entirely gone, the discharge proceeding from the middle ear. The tonsils were enlarged, the throat red and congested, with several enlarged cervical glands.

I directed simple cleansing of the ear with an infusion of chamomile flowers, several times a day, with a weak lotion of subacetate of lead, to reduce the irritation of the auricle, to be applied with a pledget of lint. Also, a solution of zinci sulphas gr. j to the ℥j of water, applied by means of a small syringe, and then to allow it to flow out.

Directed, also, that her diet should be nourishing, with the use of cod-liver oil, a teaspoonful three times a day, with a salt bath once a week.

*March* 24. To-day, offensive discharge much less, right ear much improved in appearance. Directed ½ gr. of sulphate of quinia three times a day, with the cod-liver oil to be continued.

*April* 8. Much improved in all respects; discharge still continues; was able to resume school duties.

Case VI. *Cephalic Otorrhœa the result of Scarlet Fever of three years' duration; Post-mortem.*—Mary H., æt. six years; had scarlet fever severely when three years of age. Was a long time feeble, but her ear was not treated, except to wash and keep it clean.

Towards May, 1857, the child began to complain very much, and came to my office. Ordered a small blister, with a solution of one gr. sulphate of zinc to one ounce of water. As an internal tonic ½ gr. sulphate of quinia three times a day. On examination, the right membrana tympani was gone, and there was considerable discharge of unhealthy pus from the ear, showing disease of the bones. Having been benefited by the treatment, she did not return to the office until June 6th, when she was suffering intense pain from catarrh in her head, the discharge being much increased from exposure; being a very wilful child, the parent had but little control over her. I directed counter-irritation to be renewed, with the internal use of an opiate, to relieve pain; did not leech her on account of her feeble state.

Visited her on the 8th. Pain still very persistent, and head bent to the side of the affected ear. Fearing convulsions, ordered four leeches to the back of each ear, with sedatives internally, opiate fomentations to the ear, and warmth to the feet, baths, &c. In spite of treatment she continued to grow worse, and had a severe attack of convulsions on June

26th, which yielded to leeching and cold applications, but was soon followed by a state of coma.

She died on the 18th of June, but previously had considerable discharge of pus from her nose, and was unable to swallow for a day or two before convulsions set in.

The family being very unwilling to allow an examination, I was only permitted to remove the temporal bone and ear, which I did by sawing a V shaped piece, and removing the ear entire. The coverings of the brain, in spite of her anæmic condition and her inability to take nourishment, were much congested and thickened, with effusion of fluid in the ventricles, with considerable softening of the substance of the brain.

*Ear.*—The membrana tympani was almost gone, but, strange to state, in the middle ear, although filled up with green pus, and the membrane soft and detached, I found the malleus and incus, which I have in my collection, but on cleansing the two bones they were found ulcerated. The semicircular canals and cochlea were almost free from disease, which had passed from the middle ear to the membranes and brain, causing a low form of inflammation, with softening and effusion, ending in convulsions and death. What seemed very remarkable in this case, was the long period which the small bones remained in the ear in spite of the discharge, showing how slowly the ligaments which attach the bones ulcerate; thus accounting for the power of hearing in many persons suffering from otorrhœa; the chain of bones, although ulcerated, yet retaining their place, and communicating the sound to the nervous expansion of the auditory nerve. She had no symptoms during life, of facial paralysis; the bending of the head to one side seeming to indicate some disease of the top of the vertebræ, but no examination of that part was permitted by the family.

This imperfect paper on otorrhœa, as a result of exanthematous inflammation of the mucous lining of the tympanal cavity, or extension of the same affection from the throat, upwards through the Eustachian tube, I am well aware is not arranged according to the anatomical classification of Mr. Toynbee, the most distinguished authority on this subject, for although I consider his a good one, yet it has its defects in its extreme subdivision of tissue affected. It is still doubtful to my mind how he, or any one else, can determine the precise tissue which is affected in chronic discharge from the ear, more especially at a public clinic, for the time afforded for examination of each case is often so short, the history given so imperfect, that it is difficult from the patient's statement to know what was the primary cause of the mischief; for we certainly cannot, with all the light we can throw upon it, state which of the five layers of the membrana tympani is affected, when, perhaps, it has been for years bathed with pus, mucus, or a substance which resembles very much the curdy matter found in scrofulous abscesses.

For those interested, I will here give a synopsis of the class of cases met with in my public clinic at the Western Infirmary.

A discharge from the ear will make one-half of my cases arising from chronic inflammation of the external auditory canal, ulceration of the membrana tympani, or disease of the middle and internal ear. Accumulation of cerumen, causing deafness, or an entire want of it, with inflammation of the glands, occurred in about one-half of all my cases, with or without pain and tinnitus aurium. Then follows, in point of frequency, catarrhal inflammation of the auditory passage or middle ear, with mucous accumulations in the Eustachian tube, forming one-tenth of the whole number.

Polypi and fungous excrescences in the auditory passages, or projecting through an ulcerated opening in the perforate membrane. Acute cases of inflammation of the membrana tympani are rare, but chronic cases are numerous, with opacity, thickening, &c., with or without occlusion of the Eustachian tube. This is one of the most difficult diseases to treat, if it has been of long standing.

Eruptive affections of the auricle are numerous, as herpes, eczema, &c.

There are certain diseases of the ear which are very rare, namely, nervous deafness, in which the auditory nerve is alone affected.

I will conclude by the recital of a case of complete perforation of the membrana tympani, in which there being no hope of restoring the natural membrane, an artificial one was substituted with benefit to the patient.

CASE VII. *Otorrhœa with Perforation of the Membrana Tympani, with the Application of an Artificial Membrane with Success.*—James Riddle, æt. 24 years, a native of Ireland, by occupation a silk weaver, applied January 21, 1858, at the Infirmary, on account of a troublesome discharge and deafness in his right ear, from scarlet fever, which he had at the age of thirteen. He has become so deaf as not to hear a watch with the right ear, even when placed in immediate contact.

On examination with a good light, the meatus was found filled up with dry mucus, pus, &c., upon removal of which, by careful syringing with warm water, the membrana tympani was found entirely gone, and the lining membrane of the meatus thickened and contracted. Astringent and stimulating injections were now employed to change and alter the secretion, and he was directed five grains of iodide of potassium in an infusion of humuli, three times a day, with counter-irritation behind the ear, by cantharidal collodion, and to cleanse the ear with warm water three times a day.

*January* 23 Parts free from accumulation. After wiping out discharge of pus, &c., a small portion of finely powdered cupri sulphus was blown upon the altered mucous membrane, and a wash of zinci sulphas gr. j to each f℥j aqua, was directed to be employed after washing out the ear.

26*th*. Discharge has moderated, but hearing not improved, not being able to pass air through the Eustachian tube. I therefore carefully introduced the Eustachian catheter at two different sittings, and passed air, after some time, through the discharge, so that I could hear the air bubling by the aid of the otoscope.

29*th*. Same treatment; still improving.

*February* 9. Discharge still less. Tried the moistened cotton, so as to improve the hearing, but it increased the discharge; although removed and cleansed, the itching was so intolerable, that he removed it, being unable to bear it, and again resorted to astringent and stimulating applications to moderate the discharge.

12*th*. Introduced an artificial tympanum of vulcanized India rubber, made by Mr. Kobe, of this city, which gave him no pain, and his hearing was improved.

15*th*. The discharge is again on the increase, and has blackened the silver wire, and caused the India rubber to wrinkle and change its color, so that it was removed, and the ear allowed to rest.

18*th*. Is very comfortable to-day; can hear best in the open air. Introduced the tympanum himself, he finding out the right spot; for if he pushes it too far, it is of no use to him. He has been testing his powers of hearing by a clock.

24*th*. Returned to-day and states that he cannot hear so well; when, upon examination, I found the Eustachian tube blocked up again with mucous accumulations. I again dilated it with a series of injections of warm air; and on filling up the ear with a weak solution of cupri sulphas, by making an effort to swallow, air passed up in bubbles through the liquid. This effort to swallow, with the nose and mouth closed, I told him to make each day when he removed his artificial membrane, so as to keep the tube pervious.

*Conclusion*. —This patient continued to visit the Infirmary twice a week until the 17th of March, when he left for the country, having but slight discharge, just sufficient to moisten the artificial membrane; being able to hear conversation with ease and comfort, and even the ticking of an ordinary clock across a room.—*The Med & Surg Reporter.*

## *Removal of Urinary Calculi from Right Lumbar and Pubic Regions, by Excision.* By J. W. Wyman, M. D., of Beaufort District, So. Ca.

An interesting case of urinary calculi came under my charge as long ago as 1836. The victim of this dire scourge was a man of strong will and endurance, and could unflinchingly have been a martyr to any cause, to which his reason assented as just. He was then nearly fifty years of age, and for more than twenty years he had a history of suffering to relate which could not fail to interest the sympathy of humanity. Beginning while yet a young man, persecuting its victim for years, with only an occasional respite, and that, too, when the sufferer, by his ample means, had availed himself of medical advice and aid, and visited the several "watering places" of repute for such "ailments," it was at once set down as having its "play and affinities" upon a system of the constitutional diathesis.

Periodically, though at irregular intervals, numerous small calculi of different kinds, as far as my limited means of analysis enabled me to ascertain. were voided with the urine, after means had been used to allay constitutional and local irritation. Retention of urine from mechanical irritation of the bladder and neck was the most apparent proximate cause of suffering; but through reflex action, the stomach and even the nervous centres were profoundly implicated during the paroxysms.—When these subsided so much relief followed that I at once concluded there could not be in the bladder any large calculi, as there remained no marked symptoms of such a condition.

The local treatment which, during these intermissions of suffering, I concluded to be best adapted to meet the exigencies of the case, was to enlarge as much as possible the urethra, and thereby diminish its irritability and susceptibility to the influence of these mechanical causes of pain.. I put my patient upon the daily use of regulated sizes of gum elastic bougies, which proved to be of great service.

The deposits showed that the oxylate of lime was the predominant compound, though mixed with these at times was a considerable discharge of the red sediment of uric acid, and some few of the triple phosphates, according to the tests of Golding Bird; and the appearance of the latter, I believe, is most often found associated with a calculus in the bladder, or some organic mischief of that organ or the kidneys.

Internally I prescribed the nitro-hydrochloric acid in solution to meet the indication of the oxylate; occasionally suspending its use and administering the well-known remedy, uva ursi and soda, the pipsissewa (Pyrola umbellata) and other kindred remedies, restricting the regimen to those articles of food most easily digested, and I ordered the clothing to be regulated so as to maintain a uniform temperature of the skin, and exercise to be taken in the open air, when the weather was suitable, so as to furnish the system with a full supply of oxygen.

The kidneys I regard as the emunctories of the devitalized constituents and compounds of the body, no longer of any service; the drainers of deleterious and useless fluids, and debris of secondary assimilation; and though the laws of vitality ever seem opposed to those of chemistry, in nutritive assimilation, and wonderfully exert their influence for the preservation and even restoration of the body, still when certain nonvitalized elements come together, whether in or out of the body, chemistry asserts its right to make up such compounds as come under the range of its laws of affinity. It seems peculiarly active in bringing its laws into operation among the constituents, which make their way through the circulation to the kidneys; and when favored by subjects of sedentary habits, ("free livers") impaired digestions and defective cutaneous functions, there is an assemblage of non-vitalized elements centred in the system which take on their play of affinities and fasten their results upon the small joints of the extremities, where the circulation is sluggish, and apply the rack of gout; or on the larger ones institute the tortues of rheumatism; or take their meandering course to the kidneys, and settle down into the no less dreaded form of calculi. These few incidental remarks are thrown out to show the probable causes of calculi, and how closely allied this disease is with other painful affections, which as if "to add injury to insult," sometimes combine their forces in the same subject.

Continuing my treatment for some little time, my patient, a man "of the strictest sect" as respected "his manner of life," for he had long been a sufferer, and had learned from experience the best regimen for his condition, enjoyed an interregnum of suffering for upwards of two years, and began to console himself with the idea that he was well nigh a sound man, when I was summoned to see him again suffering under a retention of urine. His general symptoms were those which are consequent upon depressed nervous energy, and resembled those of persons laboring under hypochondriasis, or severe dyspepsia, in addition to those of retention.—He wore an anxious look, and had a bounding pulse. Venesection and the warm bath were followed with a discharge of urine, preceded by a copious flow of mucus and pus, and perhaps some small calculi. Naturally erect in gait, I had recently observed in the patient some inclination of body to the right and forward, which change of posture he referred to "the small of his back." On examination of the region over the right kidney, I found a deep fluctuation, caused evidently by a large sac containing pus. I informed him of this circumstance, and expressed my belief that I had found the fountain from which flowed the pus that he had been discharging from his bladder. Stimulating poultices were ordered to be applied to the part, in order, if possible, to invite the contents of the sac to the surface, so that a surgical operation would be less painful and hazardous, for I had determined to relieve the burdened ureters from the labor of discharging so large a quantity of pus. In a few days there were slight indications of a swelling and redness; and fearing, if the operation were deferred much longer, that the sac might rupture internally, I determined to operate at once, stating that the case was anomalous to me, and the result of the operation, though the only alternative, doubtful; that in other regions and structures the same indications called for the surgical instrument; that though no doubt existed in my mind that the sac directly communicated with the kidney, still an operation might be the means of restoring him to tolerable health, and that deferred much longer, the lamp of life must be extinguished.

Accordingly a free incision was made about two inches from the spine, a little below the last false rib; this was followed by a full pint of pus, strongly impregnated with the peculiar aroma of urine, and from pressure, pure urine, came away with pus. The flow was stopped, and the orifice filled with a tent. On removing the tent the next day, more pus was voided, and in gently carrying a tent down to the bottom of the cavity, the probe came in contact with a hard substance, which I decided to be a calculus, the irritation of which was the cause of this large collection of pus, and the general symptoms of depressed nervous energy.—The calculus, after extraction, was found to be an inch and a quarter long, somewhat irregularly oblong, dumb-bell shaped, with small, sharp, rough elevations, and of a brownish color, answering to the description of of mulberry calculus, the oxylate of lime.

This operation was performed in October, 1838, and up to 1845, the patient's health was generally good, he being able to attend to his business, and represent the parish as senator for two terms. The last year of his public service unfortunately exposed him to the measles, and kindled up anew the latent remains of his old diathesis. In May, 1846, a small tumor made its appearance on the abdomen, about two inches above the pubis, an inch or so to the right of the median line, and put on the character of a boil, which, on puncturing, proved to contain a calculus. This had left its bed in the right kidney, made its way by the old cavity, until, impeded further by the cicatrix, it passed round just above the ilium, and following the course of the oblique muscle, made a lodgment, from which it was with some difficulty extracted, in consequence of the fibres of the structure being insinuated into the rough elevations of the stone.

By tonics and anti-lithics, health was measurably restored, and my patient shared, at the declining age of three-score years, a fair amount of health. The curtain of death dropped at the age of sixty-two.

This was a remarkable case of cheerfulness and suffering blended, and of a life prolonged under the pressure of great bodily infirmity through nearly two-thirds of its journey.—*Charleston Med. Journal & Review.*

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## *St Louis Medical Society.*

Dr. W. M. McPheeters reported to the Society a case of Unusual Rigidity of the Perineum.—This case, said he, was interesting in many respects, especially in reference to the obstetrical procedure which was resorted to, for its relief.

At 9 o'clock, A. M., he was called to a lady then in labor with the first child. Things had proceeded on slowly but regularly, and in the evening, the child's head had fairly descended into the pelvic cavity; at midnight, the head reached the perineum, which it considerably distended; the pains then were so frequent and so powerful, the distension of the perineum was such that at every moment he expected to see the issue of the child's head. However, notwithstanding the energetic action of the uterus continued without intermission, no progress was perceptible. Fearing at this juncture an imminent and extensive rupture of the perineum, he had recourse to venesection to the amount of thirty ounces, to the warm bath, to fomentations, ect.; the state of nausea in which the patient was for several hours, contra-indicated the use of antimonials. In spite of all these means, the rigidity of the perineum gave no signs of yielding, and in order to deliver the patient, he feared that no alternative was then left him except to lessen the child's head. However, before resorting to this extreme measure, he thought that he would try another means. It was to incise the perineum. This he did by introducing a guarded bistoury at the margin of the extended vulva and performing an incision in the perineum in a diagonal direction, sufficient in length to procure the desired opening; the opening was hardly completed, when, with strong expulsive pains, the child's head made its appearance externally, and was soon followed by the shoulders and the rest of the body. He thought this result very encouraging, and although not aware that this operation had been performed before, he would certainly have recourse to it again under the same circumstances, and would recommend it to others.

He would further remark, that the child was born alive and that the patient recovered without any untoward symptom.

Dr. Pallen said, that in his opinion, Dr. McPheeters, under the above circumstances, had adopted a most judicious course of conduct. Not only was the operation warrantable, but it had been recommended by the highest authorities, such as Dr. Blundell. He had himself taught this procedure and applied it in similar cases for many years. Lacerations of the perineum were, said he, very much to be deplored and should be prevented with the utmost care. This laceration may extend sometimes very far, involving the sphincter ani, etc. However, in a case of that description, he had observed an admirable proviso of nature, which consisted in the establishment of another internal sphincter for the anus above the seat of laceration, thus preventing the disastrous consequences of this lesion under ordinary circumstances.

Dr. Hammer, in reference to the case related by Dr. McPheeters, said, that the procedure he adopted in this instance was a regular obstetrical operation taught and practised in Germany for many years. Naegele, whom he heard lecturing on this very subject, speaks of this operation as having been of long use in Germany. Dr. Hammer added, that in order to make the incision fulfil its object, which was the enlargement of the vulva, the incision should be sometimes rather extensive and deep. If the incision, said he, was not sufficient, the pressure of the child's head would certainly continue it and produce thus a ragged cut instead of the clean incission which the knife would perform. He would remark, however, that it is a thing of rare occurrence that the distension of the perineum be so great as to necessitate this operation. By referring to the statistics of the large hospitals, we seldom notice this operation mentioned. In Germany, forceps are generally used in such cases. Their action is to alter the form of the child's head, by elongating it and thus facilitating its passage. Moreover, lessening the rigidity of the perineal muscles by other means; among these, chloroform by inhalations or local fomentations. Kneading the perineum, he said, would also often be of benefit. Killian, of Bonn, recommends this method.

Dr. Pallen, in reply to the above remark, said, that he thought that the applications of the forceps would have here increased instead of diminishing the difficulties. The forceps, said he, are compressors of the head only to a very limited degree, as shown by Baudelocque. The forcep is mainly an instrument for extraction, a *tire-tete.* Chloroform, said he, was advisable for many reasons. It does relieve spasmodic muscular action; he had tried it many times with marked success in cases where the version was indicated, and where it would have been next to impossible without the relaxing influence of this powerful anæsthetic. The kneading, spoken of, merits also, said he commendation; he had practised many years this method, which he once learned from Dr. Linlon.

Dr. McPheeters replied, that he was well convinced that in this case an application of the forceps would inevitably have caused a rupture of the perineum. He had often applied them under similar circumstances, but not when there was that degree of rigidity; he added, that fomentations and inunction of oil had been freely used; the patient was already naturally nauseated so as to preclude the use of antimony, she had been bled to a considerable amount, and the co-aptation of the head to the perineum was so intimate that the very act of introducing the forceps would have produced laceration. Furthermore, there were expulsive pains enough without the forceps. Chloroform was not administered on account of the repugnance of the patient's friends to it. Moreover, he considered that the very pressure of the child's head was the greatest relaxant that could have been devised; and all the above means, after a fair trial, proved of no avail. But after the incision made in the perineum, the child's head issued without the slightest difficulty.

Dr. Hammer considered the variety of opinion regarding the use of the forceps in these cases, as a mere matter of discrepancy between two continental schools. In England and America, craniotomy, said he, was outrageously frequent, whilst in France and Germany, forceps operations were preferred to the former more bloody procedure. The Germans consider that a certain degree of disproportion between the child's head and the pelvis or the perineum may be overcome by a judicious use of the forceps. However, the disproportion is sometimes so great that it can not be overcome. Under the circumstances of Dr. McPheeter's case, the Germans would have used the forceps; there was, it is said, an impossibility of introducing the instrument during the pains, but in the absence of a pain this might have been done. It has been said that the rigidity of the perineum is principally kept up by the presence of the child's head; but the spasmodic contractions of the perineum thus induced, alternate with those of the uterus. By the action of the forceps this alteration is annulled by the continued pressure it allows to be made on the perineum with the child's head, whilst it is embraced in the blades of the forceps.

Naegele, although of a timid temperament, in other things, used the forceps liberally.

The forceps, by compressing the child's head, elongated it. This instrument did not perhaps much diminish the size of the child's head, but by altering its shape it facilitated its passage through a narrow pelvis.—Did not nature proceed in the same manner in cases of disproportion between the head and the pelvis? In those cases it was to be remarked that the head was sometimes considerably elongated. In this wise did the action of the forceps imitate the operation of nature.

Dr. McPheeters admitted the possibility of this elongation. As for using the forceps in this case, he considered it was utterly impossible either during a pain or in its absence; for the fitting of the head to perineum was so close the patient complained loudly of the mere introduction of the finger, which she compared to a cutting instrument.

As to the spasmodic contractility of the perineum referred to by Dr. Hammer, it was altogether destroyed in this case, as will occur whenever the muscular fibre has been acting powerfully for a length of time.

Dr. M. M. Pallen thought that so far as this case was concerned, the delay of the passage of the child's head through the vulva was not owing in any degree to inertia of the uterus or to a want of the *vis a tergo*; this existed to a sufficient extent to have procured the birth of the child under ordinary circumstances; but here was a most rigid perinieum against which the child battered in vain—a danger of laceration was imminent as the result of natural forces alone—the forceps, he thought would have increased the danger of this laceration. A great deal of prudence should guide the accoucheur in deciding upon the cases where the forceps would be useful. He was himself a strong advocate of the forceps under certain circumstances, although he must say that he condemned the use of the *long* forceps under any circumstance. In this, he was aware that he differed from the opinions taught by all accoucheurs in America, and especially in Germany. He was not, however, inclined to undervalue the great and valuable progress made in the art of obstetrics by the Germans; he knew full well that Naegele had done more than any man, except Baudelocque, to advance this art. But whilst he acknowledged their eminence he did not in everything adopt the teaching of that school; he endorsed the doctrines taught in London and Dublin; he was convinced from statistics, that more women recovered after craniotomy, than after the use of forceps when applied above the pelvis. The mortality of the children was also very great in those cases; frequently, also, various ruptures, and also vesico or recto-vaginal fistulæ were the result of the imprudent applications of the forceps. Sieblod had, said he, applied the forceps once in every seven cases of midwifery which occurred in his practice. This preference of the Germans for the forceps, was, he said, not based upon merely scientific reasons, but resulted in a great degree from peculiar religious prejudices.

Dr. Hammer, in reply, denied that the German accoucheurs were influenced by peculiar religious opinions in this matter: their adoption of the forceps, in many cases where it was not employed by the English, was based upon purely scientific grounds. In Germany, the forceps was better studied and understood in all its applications, and selected, therefore, as a very safe and useful instrument in cases where the English or American accoucheur would, without hesitation, sacrifice the child's life. In Germany, in those cases, they tried to save the child and mother also, and they, generally succeed. In England, one of the reasons why the forceps were not used, was on account of that mock modesty so peculiarly British, which did not allow of a woman to be uncovered. Acting on this false modesty they have not encouraged the establishment of lying-in hospitals to the same extent that they have done on the continent. They do not understand the forceps for want of facilities to study its applications, hence their hesitation in applying it. The Germans, who are familiar with that instrument, are more bold in its employment.

As for the action of the forceps in the case of Dr. McPheeters, he thought that the rigidity of the perineum was owing to a spasmodic contraction of the muscles of that part, comparable to the spasmodic strictures which occur sometimes in the urethra. If a bougie is introduced when one of these spasmodic strictures exists, it will impinge against it, without penetrating through it; but if the bougie be left there for a few minutes, the part will gradually become accustomed to it, and it will at length penetrate through the stricture. The same process will occur in spasmodic contraction of the perineum. This said he, was the rationale of the action of the forceps in those cases. If the child's head be pressed for some time by the forceps on a rigid perineum, the spasmodic contraction of that part will gradually yield. As for the ruptures and vesico or recto-vaginal fistulæ, which according to Dr. Pallen, were often the result of the use of the forceps, he thought that they took place oftener when the forceps were not used, as in those cases which have been left to nature or where craniotomy was performed. Vesico-vaginal fistulæ happen mostly in the protracted cases which have been left to nature. Statistics would prove this.

In the United States there are, said he, as many craniotomy cases as there are forceps cases in the rest of the world; because the forceps are not used at all in some cases where it could have been beneficially applied in the beginning of the labor, and craniotomy is resorted to as a last resort. He would not blame the profession here for this state of things; it originated from the want of lying-in hospitals, as he had already remarked.

Dr. Pallen said, that he would see with the greatest satisfaction the establishment of lying-in hospitals in this country, and he expressed the hope that the Biddle Lying-in Hospital, in process of construction in this city, would some day prove a source of practical instruction to students desirous of perfecting themselves in the science of obstetrics. As for himself, he was far from condemning the use of forceps at the inferior strait; he was in the frequent practice of applying it himself—and he had taught its utility for years;—he would add, that his opinion was that it was not applied in many cases in this country where its usefulness would be incontestible if better understood, and where craniotomy was, unfortunately, performed, especially in the country, where the practitioner is often left to himself.

Dr. Smith was one day present, said he, at a lecture on obstetric operations, delivered by Dr. Murphy, of London; in that lecture, he made the startling remark, that statistics would bear him out in the assertion that death oftener followed operations of craniotomy at the superior strait than cæsarean sections.

Dr. Smith said, that as for the rigidity of the perineum giving way under the continued pressure of the child's head, as asserted by Dr. Hammer, he would rather expect to see the rigidity increased under this prolonged pressure; he would expect to see inflammation setting in under these circumstances, and a spasmodic contraction firmly established. As for the procedure employed by Dr. McPheeters, in the case he had reported, he thought it perfectly warrantable and worthy of imitation under similar circumstancas.—*St. Louis Medical and Surgical Journal.*

## *Report to the State Society of Michigan on the Diseases of Children.*

BY A. B. PALMER, M. D.

AT the last meeting of this Association I had the honor of being appointed to present a Report on the *Diseases of Children.* In discharging the duty imposed by that appointment, in the absence of any intimation as to the particular department of the general subject which it may have been thought desirable to have presented, and considering the fullness with which particular forms of Children's Diseases are treated of in the books accessible to all, I propose to present to your attention the importance of carefully studying these diseases, with a view, if possible, to diminish the extensive suffering and terrible mortality prevailing almost everywhere, among these little innocents of "tender age". Leaving then, for other hands or for other occasions, if the subject should be deemed worthy of being pursued, a special consideration of the peculiarities of the Diseases of Children, or the particular causes which operate in their production, the subject of this Report will be, *The great importance and urgent duty of speciallg studying the Diseases of Children.*

Our Profession is a benevolent one. To do good is our business. We are placed as guardians over the public health. We are to repel the enemies of human life. It is our special province to shield from danger and relieve the suffering of those who, from a want of knowledge or of power, are unable to protect or relieve themselves. The great danger, the utter helplessness, the total dependence, and the severe suffering of sick infancy, appeal most eloquently to our benevolence. We have all been children—dependent helpless children. We have all had a mother's care; and in our intercourse with the world; we have observed something of the all-pervading intensity of a mother's love. Many are fathers; and all have witnessed the calm, deep earnestness of a father's affection. As sympathizing integers of a common humanity—as men, as well as members of a benevolent Profession,—the sufferings and dangers of children are urged upon our attention.

But I propose to present the subject in a scientific and more strictly professional point of view.

The extensive prevalence, the great severity and fatal character of the Diseases of Children, render them subjects of intense professional interest.

As the result of careful investigation, and of accurate statistical record, it is found that throughout England and Wales, *one child in five dies within a year after birth, and one in three before the completion of the fifth year*. Taking into the account only larger towns and the metropolis of Great Britain, a much larger and more frightful proportion of infantile deaths, compared with the survivals, will be found.—According to these statistics, each young family containing three little children must expect to deposit one of them in a diminutive grave, and experience all the sadness of desolation—all the anguish of wounded affection—which such an event involves.

As to the infant mortality among us, in the absence of proper Registration Laws, we are unable to speak with the same particularity and precision. Some of the older States, it is true, have Registration Laws in force, but none of them have the perfection of those of England and Wales; and in our own State (I say it in sorrow and in shame), the subject, except as served by individuals, is totally neglected. Even in this city, I have sought, through a medical friend, in vain, for records which would indicate the number of children that have died during the past year, as compared with the whole mortality! Whether it is made the duty of any officers to keep such records, I have not learned, but, if so, it seems to have been neglected.

In many of our larger eastern cities, mortuary records have been kept for many years past, and, from these, tables of mortality have been constructed. They merely, show, however, the number of deaths at different ages; but from them we do not learn the proportion of those that are born who die in infancy. We however know the positive infant mortality, and its proportion to that which occurs at more mature age.

The deaths in the city of New York, during fifty years, from 1804 to 1853 inclusive, was 363,242, and of these 176,103 occurred in children under five years. This is something less than one-half; but during the latter part of this period the proportion of infant mortality has been increasing, so that for many years past more than one-half have been under five years. Thus, in 1854, the total deaths under five years was 15,673; and above five years, 12,865. In 1855, the total under five years was 14,063; and above that age, only 8,679. In 1856, under five years, 13,373; above, 8,285 During this latter year nearly five-eighths of the total number of deaths were under five years, and over one-half were under two years, and nearly three-eighths were under one year.

Though the proportion of infant mortality is greater in New York and the other large eastern cities, and is rapidly increasing there, while decreasing in most of the European cities, yet our own small cities and interior towns present pictures scarcely less appalling.

From a table of the deaths in Coldwater, during the year 1856 presented, at the last meeting of this body, by one of its most industrious members, Dr. J. H. BEECH, we learn that of the 70 cases, 38 were over five years, and 32 were under that age. From the records of the city sexton of Ann Arbor, the seat of our University, and one of the most healthy localities anywhere to be found, the deaths during the past year (1857) were 56, of which 22 were of persons over five years, and 34 under that age.

From the records of the city of Chicago for 1856, containing a population of 110,000, though somewhat imperfectly kept, and perhaps not altogether reliable, we gather that 1,950 deaths occurred, of which about 800 (something less than one-half) were under five years.

These facts are sufficient to show the enormous proportional extent of Disease and Death among these tender buds of humanity, and to commend the subject, on this account, to our consideration, as of special professional importance.

But can these results be avoided? Is it not in accordance with the plan of the Creator—within the designs of Providence—that a large portion of the human family should perish in their infancy—should thus be cut off before the full development of their being?

Although medical men are prepared to answer these questions in their own minds more promptly than others, yet perhaps, even among us, they require a respectful consideration. There can be no doubt of the fact that hygienic and medical management can alter these results; as well might we question whether the careless farmer, who so manages as to allow his young lambs to make their appearance in the dead of winter, and without proper protection leaves them to their almost inevitable fate, could have altered the result, by having them first open their little brutish eyes to the light of a vernal sun, and having for their first couch the warm earth, covered with Nature's carpet of green, instead of the frozen earth, covered with the winding sheet of snow.

About one hundred years ago, it was found, that in the imperfectly ventilated and improperly managed work-houses of London, of every *twenty-four* children born and retained in that establishment *twenty-three* died before attaining the age of one year! The subject was inquired into by parliament; an improved system of management was adopted, and the proportion of deaths was quickly reduced from 1,500 to 450 a year, thus saving annually, in these single establishment over 2,000 lives!

The more fully we realize, and the sooner all men and all women understand that disease and death are the result of fixed physical laws, and that most cases of sickness and *premature* death are the results of the palpable violation of these physical laws—the necessary penalties of physical wrong-doing—the better will it be for the human race; at least, if healthy existence is a blessing. That diseases are the results of the operation of natural laws, and not special Divine infliction, is no new doctrine among medical men; it is at least, as old as HIPPOCRATES, and has indeed ever had an existence among the eternal truths of nature.—There is a mistaken notion among many good people, which attributes all cases of sickness, injuries and death among their friends at least, to a

*Mysterious* Providence, though capable of being traced, with the utmost certainty, to violations of general and beneficent laws. I take, for illustration, a case of actual occurrence now present to my mind.

A mechanic was engaged in constructing a building. He was upon a scaffolding some distance above the ground, so built as to be capable of sustaining a weight, say, of three hundred and ninety-nine pounds. The weight of the man, and his building materials placed upon the scaffold, was, say, four hundred pounds. In accordance with the fixed law of attraction—of cohesion and gravitation—the scaffold gave way, and the man fell to the ground. The momentum acquired by the fall, his position, and the particular condition of the surface, resulted according to the same fixed laws, in a fracture of his leg. The poor man was conveyed to his home, where he was soon surrounded by his kind friends, and the venerable patriarch of the group spoke almost complainingly of a *Mysterious Providence* which had placed the good man, so much needed by his family, upon a bed of helpless suffering.

Now I do not accuse the sufferer in this case of having committed any moral offense—that is another and a distinct question; but, though committed ignorantly, I do accuse him of having violated the physical laws of GOD, established for the order and harmony of the Universe; and he was but suffering their just and necessary penalty in the injury inflicted. Instead of being a mysterious dispensation, it was the most natural, and, indeed, without a miracle, the only possible result of his own free act. But, suppose a miracle had been interposed, and, for his supposed puny accommodation, the general law of gravitation had been suspended;—planets and systems would have been thrown from their orbits, and the Universe would have fallen into dissolution. Or, if the law of gravitation had been suspended only as it related to his own body, he would have remained above the earth, and been thrown from its surface, while it whirled on its diurnal motion, and it would have passed entirely from him, leaving him in the broad waste of space as it flew on with lightning speed in the path of its annual orbit; and the poor man, if he could have collected his thoughts in time, would have cried out for the restoration of the law, though in its beneficent operation it had cost him the pain and danger of a broken leg.

I do not say the man was not laid upon his bed of suffering by the hand of Providence. He was bound there by that Being who has bound all nature fast, not in fate, but by law, and who, while not allowing a sparrow to fall to the ground without His notice, yet causes every sparrow to fall in obedience to the same law which holds the sun in the heavens.

I do not say that every casualty, sickness, or premature death is as easily traceable to an apparent cause as in the case I have instanced, to illustrate the principle; or that in every case evil results may be avoided as easily as they could have been in this. I do not say that in every case, sickness and premature death can, by any means, be avoided. From the unfavorable circumstances and errors of the ancestral race, there is often a feebleness of the vital force in individuals, which renders them incapable of enduring the ordinary vicissitudes of the most favorable hygienic circumstances, and with whom no care or skill can avert such consequences. Besides, there are contagious and other diseases which attack the most vigorous and best cared-for, which our present knowledge does not enable us to prevent. But I do say that all diseases are due to natural causes; that a very large proportion of them—that especially the enormous infant sickness and mortality which our statistics show to exist—are produced by causes which may be avoided, and which it is our special duty to search out, expose, and correct.

Let not what has been said respecting the fixed character of the physical laws, be misunderstood as tending to fatalism. The uniform and certain operation of these laws in no way interferes with the liberty of the human will, or the accountability of the free agent. The doctrine advanced, rather increases accountability. by extending it to acts under the physical laws.

I do not propose to pass beyond the limits belonging to a consideration of this subject from the stand-point of my own Profession. A special inquiry into the designs of the Creator in a theological and metaphysical sense, I shall leave, for the present at least, to those whose more special province it is to deal in such questions. It is sufficient for us to know that our business as physicians and our duty both as physicians and men, is to prevent and relieve human suffering, and save human life; and I have no reason for admitting the thought, that it was within the Divine plan that a large portion of the human family should be cut off in infancy, thus destroying so many specimens of handiwork, before their completion.

It would be a grave error, in my estimation, to suppose that the Creator designed that any of his laws should be violated; but it seems to have been in His design that, when any of those laws were violated, a penalty in kind should follow their transgression. The man or woman who, either knowingly or ignorantly, violates one of the natural or physical laws of his or her being; or the man woman, or child, in relation to whom, by whatever agency, a physical law is violated, in the fixed economy of the Universe must suffer a physical penalty—a penalty commensurate with the gravity and extent of the violation. The suffering of a physical penalty is irrespective and independent of any moral quality in the violation; but disobedience to physical laws becomes a moral offense when done consciously and willfully. As the guardians of helpless infancy, the moral responsibility is ours. We have no more reason for believing that the Ruler of the Universe desires the physical suffering and death of the physical transgressor, than that He desires the moral death of the moral transgressor. It is true that the result occurs in both instances from the operation of laws which He has established; but those laws were established for beneficent purposes—to develop animal and spiritual life and being, but not to destroy it.

It is sometimes fondly and poetically said, that certain little children, though ever so much the victims of mismanagement and consequent disease, are quite too pure for earth. In all given cases, it would perhaps be unkind, to rudely take from a bereaved parent the consolation which such a sentiment would afford; but whatever may be the condition of the innocent little spirit, the simple truth in relation to the material body is, that it is too corrupt for remaining on the earth. We certainly could not be justified in saying that, in any sense, the 2,150 infants under one year old which annually died in the work-houses of London, previous to the reform referred to, were more pure than the same number annually saved from death by that reform.

But it may be suggested (though it is impossible it should be by medical men), that, after all, it may be as well that children are thus removed from the evil to come. Are we thus to judge of Heaven's great gift of life? If such considerations are to abate efforts for preserving infantile life, let us say no more of the inhumanity of the sacrificing of children to heathen gods, or of the barbarity of casting them by hundreds into the waters of the Ganges. This speedy and almost painlesss method of destroying them is humane and merciful compared with the protracted suffering and lingering death which bad hygienic and medical management so often inflicts; far better would it be for the infant in New York to be cast into the Hudson to become food for the fishes, than to slowly die from want of pure air, of proper food, and of the light of heaven, whether it be in a bare and squalid cellar at the Five Points, or in a deeply-curtained and highly-perfumed chamber on Fifth Avenue; and then in the one case be cast, at the city expense, into a hole in the Potter's Field, and in the other to be solemnly deposited, surrounded by all the pomp and circumstance of magnificent woe, by the side of some tall family shaft in Greenwood. Though the grave of the one may be long strewn with flowers by the hand of affection, and its name be engraved in enduring marble, while the memory of the other is soon effaced even from its degraded mother's heart, yet the little bodies alike become the prey in the earth of the same noisome worms and decaying elements. The infant cut off from life before its conscious freedom is attained, is, of itself, but a blank in the world into which it has been introduced for other and higher purposes; and however diverse the circumstances of introduction and exit, to the same condition does each come at last. The handiwork of the Almighty has been destroyed—a beautiful casket, if it is regarded as nothing else, has been dashed to earth.

I have been led into these remarks, some of which may be regarded as digressive from the strict line of the subject, by the fact that it seems to be regarded by most persons as a matter of course, as proper as the order of nature and necessity, that a large portion of children should die; Many of the clergy preach thus, and all poets sing thus, and most people believe thus. I regard this sentiment as a grave error—a fatal heresy which has invaded the creed of humanity; for while such an opinion prevails, neither proper inquiries into the causes of infant mortality will be made, or efficient efforts will be put forth to prevent the effects of those causes. Every principle of political economy, of humanity, and of our enlightened and benevolent Profession, requires that the most careful inquiry and the most rigid efforts should be made.

But medical men should specially study the Diseases of Children because these diseases differ from those of adults. They can not be understood without this special study. They are different in their course and character, different in their appearances and treatment, and different in the methods by which they are distinguished. On these various points, however interesting, I do not propose specifically to dilate.

All those who distinguish carefully and watch closely the Diseases of Children, appreciate the force of the remarks just made. The expressions of the various suffering organs are widely different from those of the same organs in adults; and the helpless silence, the passionate agitation, and the fretful timidity of the child, combined very often with the exceedingly imperfect accounts of the attendants, sometimes hopelessly perplex even the acute physician, unless by study and care he has made himself perfectly familiar with the physiognomical appearances, pantomimic movements, and inarticulate sounds, as well as the physical signs expressive of different forms of disease, and also of the best methods of eliciting or observing them, and of overcoming all the difficulties to be encountered in the investigation. So great are these difficulties of diagnosis in many cases, that some parctitioners, after a few fruitless efforts, become satisfied with their ignorance, and declare it useless to attempt accurate diagnosis. It is unnessary to say that treatment without correct diagnosis must be quite in the dark, and, if at all active, mus- be iminently hazardous. In many cases the delicate system of the child illy bears perturbation, and the feeble spark of life many be easily extinghished. This delicacy of organization, and great susceptibility of medicinal impressions, while rendering the child more liable to be injured by rude or inappropriate treatment, renders him highly capable of responding to curative agencies, when nicely adjusted to the powers of endurance and the morditions.

It requires, then, more penetration to distinguish accurately the Diseases of Children than those of adults, and more skill to manage their cases in the most successful manner. If a professional subject increases in interest with its difficulty and its importance, then have the Diseases of Children the intensest professional interest. But do we all regard the subject in this light? Do we all take that interest in these diseases, and bestow that attention upon them they deserve? If the Profession every where did so, would not the complexion of our bills of mortality be altered? Do we not often, by our appearance of indifference in particular cases, intimate the neighborhood gossip, or some ready globulits, can manage these cases as well as ourselves?—and are we not thus instrumental in turning these children over to be drenched with the vile decoctions, or temporized with infinitesimals, when rational and skillful treatment is imperatively required?

If in this very imperfect presentation of this subject I have said any thing which shall arouse members of the Association to a higher sense of its importance, and call forth, to any extent, corresponding efforts, I shall have accomplished my most sanguine hopes, and the little labor I have bestowed upon this Report will not have been expended in vain.

[*The Peninsular and Independent Med. Journal.*]

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## *On the Constitutional Effects produced by Substances introduced into the Urethra.* By I. L. Crawcour, M. D., F. S. A., Professor of Chemistry and Medical Jurispurdence, New Orleans School of Medicine.

In the summer of 1857 I noticed that when bougies, tipped with an ointment containing morphine, were introduced into the urethra, rapid and intense narcotism was produced; and so intense and constant is the phenomenon, and so out of all proportion to the quantity of sedative employed, that I deem it my duty to lay before the profession this remarkable circumstance, especially as I can find no mention of it in books, and as even in some, the absorbing property of the mucous lining of the urethra and bladder is denied. In April, 1857, having a patient afflicted with chronic inflammation of the urethra, and who suffered intense agony whenever an instrument was passed, I thought relief might be obtained if, instead of using oil, I smeared the instrument with morphine cerate. Accordingly I prepared an ointment containing twenty grains of morphine in every drachm of spermaceti ointment, and as the inflammation was confined to the membranous and prostatic portions of the canal, I smeared the last three inches of the instrument (a silver sound) only, with ointment, passed it and allowed it to remain about five minutes.—The patient complained of feeling very sleepy, and the next day stated that he had hardly been able to walk home, and as soon as he arrived there, fell into a profound slumber. Thinking this was simply a coincidence, I again applied the ointment in the same manner and a similar result ensued. Desirous of testing whether this was not an idiosyncrasy on the part of my patient, I passed a bougie, prepared in a similar maner, on myself, and to my surprise it had not been in my urethra three minutes before all the symptoms ordinarily produced by opium developed themselves.

On the twenty-third of May another opportunity presented itself for testing this singular property of the urethral membrane in a most striking manner, on a patient whom I will call A. I passed a bougie tipped with morphine ointment, consisting of a drachm of morphine to an equal quantity of cerate, and immediately after passed another smeared with an ointment consisting of ten grains of atropine to the drachm of cerate.—The patient almost immediately, that is in less than a minute, became incapable of locomotion. I left him asleep in my office at nine o'clock, and on returning at two I found him still asleep and vomiting had taken place. It was not until four o'clock that he was capable of walking home, and then he staggered like a drunken man, and complained of a numb sensation over the whole body. Two days after, he called on me and said that as he went home he heard many persons say he was drunk, but was unable to speak—was unable to answer any question when he reached his boarding-house; as soon as he arrived there, went to bed and did not awake until twelve o'clock the next day. He says he still feels under the influence of the drug

A few days after this, another patient presented himself—a strong, robust healthy man, with a remarkable muscular development. I passed a catheter tipped with a minute quantity of the atropine ointment, certainly not as much would be equal in size to a pin head; the instrument remained in about five minutes; absorption was very rapid; even while it was in, I noticed that the pupils dilated and the voice became husky; in ten minutes, when about leaving my office, he complained of feeling drunk and numb, and walked with staggering gait. He called on me the next day and said that when he got home he felt perfectly drunk, was unable to sleep, had constant confusion, sense of giddiness, inability to speak, his throat felt dry and parched, was unable to see. This morning he feels perfectly recovered.

On the 28th of May I passed a silver sound on Mr. H., tipped with the morphine cerate. Drowsiness was produced in five minutes. He called on me the next morning, at half-past nine, to evacuate his bladder—paralysis of the bladder having occurred and retention since half-past three of the previous day, the period when the instrument was passed.

During the past winter one of our students, who suffered from stricture of the urethra, came to me for relief. As he was a very intelligent young man I considered this a very fair case for experiment, and having explained to him the nature of what I was about to do, obtained his consent to pass a bougie tipped with atropine, with the promise that he would analyze his sensations and furnish me with a written account of what he experienced. I append in his own words the result of the experiment: "On arising from the couch on which I was resting I experienced a sensation of giddiness in the head, with impaired vision, which passed off in a few minutes. These symptoms were accompanied by dilatation of the pupil. After walking a short distance these sensations returned and my gate became very unsteady· Dryness of the mouth and fauces now occurred, the secretion of saliva became almost entirely suspended, so much so, that the use of tobacco would not reproduce it. These phenomena were followed by an intense desire to urinate with inability to do so. In this condition I remained six or eight hours, when I succeeded in getting to sleep. On awaking the following morning these effects had very nearly subsided, a little dryness of the fauces being all that remained, and this gradually passed off durimg the day." Such were the sensations produced on this gentleman by an almost infinitessimal quantity of the alkaloid applied in the manner I have indicated, and the phenomena commenced in five minutes.

Since this I have employed bougies smeared with morphine and atropine ointment in at least fifty cases, and in every instance the result has been the same; but as I was desirous that this singular phenomenon should be witnessed by some of the profession, I obtained permission from Dr. Choppin to pass a boagie, similarly prepared, on a patient in his ward, in the Charity Hospital. The patient was a man not suffering from any disease of the urethra, and I passed a No. 7 silver sound, smeared at its extremity with atropine ointment, into his urethra, in the presence of Dr. Choppin. Within three minutes from its introduction, as witnessed by Dr. Choppin and several students, the pupils dilated completely; in five minutes the phantasmal delirium, so characteristic of belladonna, was developed to such an intense degree as to necessitate mechanical retraint. All these effects were produced by a quantity of atropine so minute as to be almost inappreciable. The strength of the ointment was ten grains to the drachm; the quantity smeared on the bougie did not weigh half a grain, equaling the twelfth of a grain of atropine. On withdrawing the instrument, apparently the whole of the ointment was adhereing to it, and it is probable that not the fiftieth of a grain of ointment had been removed or absorbed. This would reduce the quantity of atropine to an almost infinitessimal quantity, and I have not the slightest doubt that certainly less than the three-hundredth of a grain entered the system. But allowing even that the whole quantity absorbed, it would still be inexplicable how absorption should be so rapid and the effects produced so powerful. The usual dose of atropine is about the twentieth of a grain, of morphine from the sixth to one grain; yet in no instances, administered either by the stomach or endermically, would their effects be comparable to those I have seen and just described, as when applied to the urethral mucous membrane.

There is also another circumstance I have observed, viz.: that this absorbing power is not common to the whole urinary tract. The bladder and the spongy portion of the urethra seem incapable of absorbing. I have injected three drachms of Battley's sedative into the bladder and allowed it to remain there, without perceiving the slightest general influence. At the same time, if we pass a prepared bougie only four or five inches into the urethra, we shall not perceive any narcotic influence however long it may remain there; pass it an inch or inch and half further, and ripid narcotism ensues. It seems as if the prostatic portion of the urethra and the neck of the bladder were the only portions possessed of this absorbent property, and that the rest of the canal was inert. In order to test this, I injected into my own urethra a saturated solution of morphine, and held it for some ten minutes—of course it could not penetrate beyond the membranous portion—not the slightest narcotic effect was produced. The next day I passed also, upon myself, a bougie, smeared at its distal extremity with morphine, to the neck of the bladder, and in three minutes absorption took place, accompanied by all the effects of a full dose of opium. If we take a bougie with its last two inches only, smeared with morphine, and pass it *rapidly* into the bladder, allowing its extremity to rest aginst its walls, but its coated portion being beyond the prostate and neck, no absorption takes place, however long it may remain there; withdraw it two inches, and now allow the morphine to come in contact with the neck, absorption again rapidly ensues. These circumstances, therefore, conclusively point to the fact, that this elective power resides only in a small portion of the urinary membrane—a portion bounded by the prostate and neck of the bladder—there is a possibility that the trigone may have some absorbing power, although this is doubtful.

With regard to the rationale of this curious phenomenon, I am at a loss—it is true that the part where I have located absorption, is the one most richly endowed with nerves and blood vessels—the hypogastric plexus of the sympathetic ramifying over the prostatic urethra and neck of the bladder. Here they are very numerous and of a large size, and according to Valentin and Muller, have ganglionic swelling on various points. We have also a large congeries of blood vessels at this point, but the absorption and intensity of effects are so out of all proportion to what we observe when sedative are applied to other organs, that I cannot hazard a theory. I have simply stated the facts as I have observed them, and shall leave it to others to frame a hypothesis to account for them. I would suggest that this property, which I have indicated mignt be found useful in certain cases of mania and dilirium tremens, where we wish to get patient under the influence of a narcotic, and where they refuse to swallow. In these cases we can always pass a bougie smeared with atrpine or morphine into the urethra, and I am convinced that speedy and full narcotism would be the result.—*N. O. Med. News and Hospita Gazette.*

# EDITORIAL AND MISCELLANEOUS.

## American Medical Association.

We had the pleasure of attending the late meeting of the American Medical Association in Washington City, and while our feelings would prompt us to go into very considerable detail, we must content ourselves for the present (in consequence of pressing engagements,) with a bare reference to the many interesting features of the late meeting.

Upon the Physicians of the District of Columbia, too much praise cannot be bestowed, for the elegant and profuse hospitality extended to the members of the Association. Besides the magnificent entertainments in Washington City—the excursion to Mount Vernon, and the unique and delightful dinner at the Pavilion, (upon the Potomac,)—afforded the most conclusive evidence of the elevated, refined and generous character of the profession, whose hospitality seemed to know no bounds. To the President of the United States, Senators Douglas and Toombs, and perhaps others, is also due praise, for their attention to members of the Association.

The number of delegates in attendance was very large, (over 400;) among whom were found many of the most prominent medical men in the United States.

We think the forthcoming volume of the transactions will be unusually interesting and valuable; at least, so far as the *papers* presented, are concerned; for the discussions in the Association we can not say so much; a great deal of the time of the body was consumed in an utterly fruitless way, but even doctors are sometimes fond of speech-making, and, taking the locality into consideration, they ought, perhaps, in this instance to be excused.

One of the most prominent reports before the body, was that of the Special Committee on Medical Education, by the

Chairman, Dr. J. R. Wood, of New York city. This report, we propose to discuss in the next number of this Journal, at least, certain features, which we have no hesitation in asserting, bear the *impress* of *the fixed purpose*, upon the part of certain cliques, to control the Association, and make it the instrument of destruction to certain troublesome competitors.

The whole movement resulting in the *present* excitement upon this subject, we profess to understand, and at the proper time shall most unquestionably hold up to the indignation of the profession, who have no part or lot, no word or interest in the contemptible and selfish juggling and trickery, which certain parties have introduced into the workings of this highly honorable and useful body. Our firm conviction is, in reference to this, the most national meeting of the Association ever held, that the mass of the body had no inclination to consider the subject of medical education, which can never be controlled by the Association, and which has only proved a source of annoyance heretofore. In conclusion, we have to say that if the American Medical Association is to be converted into a "*Court* for the correction of Errors," embracing within its *grasp* this vast Union, it will soon be numbered among the things that were.

## Atlanta Medical College.

To those who feel interested in the welfare of the Atlanta Medical College, we would remark, that its prospects were never so flattering, either in the number or character of the class, the size of which will very considerably exceed that of last year; to the full extent we are confident of the regular annual increase in the numbers of those who have heretofore attended this Institution.

This regular and decided advance would be gratifying under any circumstances, but it is especially so, at a time when the country has just been passing through the recent terrible financial crisis, from which indeed, it has not yet recovered; and when the medical schools, almost without an exception, are showing diminished numbers.

## Bibliographical.

We have received from the Publishers, Messrs. Blanchard & Lea, of Philadelphia, "Dunglison's Medical Dictionary," revised and greatly enlarged, which is so well known as a *Standard Authority* in Medical Lexicography, that we feel it to be useless to say more than it can be purchased in this city, from Messrs. J. J. Richards & Co., through whose hands it has reached us.

We have also received from the same publishers, through the same hands, "A Manual of Medical Diagnosis," being an analysis of the Signs and Symptoms of Disease; by A. W. Barclay, M. D., Fellow of the Royal College of Physicians, &c.

We would desire to commend this work to the attention of all those who desire to become acquainted with this all-important part of the Science of Medicine.

There are few physicians, even of great and discriminating experience, who will not acknowledge their deficiency in that knowledge which this book is designed to convey; and to those who are just entering the profession, there are few books which can be of more value than one which will guide them correctly in the systematic investigation of the character of disease—upon the correct understanding of which their whole success must, of course, depend.

It is then to the student especially, that we would commend this work as a valuable aid in establishing in his mind, the correct principles upon which Diagnosis should be based.

We are also indebted to the same source, for "*The Principles and Practice of Obstetrics*," by Henry Miller, M. D., Professor of Obstetric Medicine, in the University of Louisville, which we are not now prepared to review, as we believe it deserves. From some little examination we have been able to give the work, our interest has been sufficiently excited to desire to give it a careful reading, which it has not been in our power to do. We hope to be able to notice it more fully upon some future occasion.

We would desire also, to call the attention of the profession to a new edition of the "Elements of Inorganic Chemistry," including the applications of the Science in the Arts, by Thos. Graham, F. R. S., L. & E., late Professor of Chemistry, in University College, London. Edited by Henry Watts, B. A., F. C. S., and Robert Bridges, M. D.

In this work is presented Mr. Graham's Inorganic Chemistry complete—the first portion, up to page 430, having been edited by Dr. Bridges, in 1852; the remainder being reproduced without alteration, from the English Edition, issued a few months since, under the supervision of the author, by Mr. Watts, whose elaborate Supplement will be found to bring the subjects embraced in the first portion, on a level with the most advanced condition of the science. Blanchard & Lea, Phila.

We have also to acknowledge the reception of "Principles of Physiology," designed for the use of schools, academies, colleges, and the general reader, comprising a familiar explanation of the structure and functions of the Organs of Man; illustrated by comparative references to those of the inferior animals; also, an Essay on the Preservation of Health. As an Elementary Treatise, and as one designed for popular use, from a slight examination we think it valuable, and, indeed, think it probable that it is the best of its class. It has been received from, and may be obtained of, Messrs. Samuel S. & W. Wood, 389 Broadway, New York City.

## *American Medical Association—Eleventh Annual Meeting.*

*First Day*—The Association met in the lecture-room of the Smithsonian Institution, and was called to order at a quarter past 11 o'clock, A. M., by Dr. Condie, of Philadelphia, when the Chair was taken by the President, Dr. Paul F. Eve, of Nashville, Tennessee. Vice-Presidents Breckinridge, of Kentucky, Reese, of New York, and Campbell, of Georgia, were also on the platform; and at their tables were the efficient Secretaries, Drs. Foster, of Tennessee, and Semmes, of Washington.

Rev. Byron Sunderland, D. D., at the invitation of the President, offered an eloquent and appropriate prayer, invoking the blessings of Almighty God upon the Convention.

Dr. Harvey Lindsley, chairman of the Committee of Arrangements, then delivered an address of welcome.

The Secretary then called the roll by States, as it had been made out up to the commencement of the meeting, and the following number of delegates responded:

Maine 2, New Hampshire 8, Connecticut 18, Vermont 1, Massachusetts 40, Rhode Island 5, New York 73, New Jersey 25, Pennsylvania 66, Delaware 4, Maryland 24, District of Columbia 25, Virginia 8, North Carolina 8, South Carolina 10, Georgia 12, Alabama 1, Kentucky 9, Tennessee 7, Indiana 6, Illinois 12, Michigan 3, Iowa 3, Missouri 4, Ohio 14, California 1, American Medical Society of Paris 1, U. S. Navy 2.

Dr. Lindsley, chairmnn of the Committee of Arrangements, reported that it had been decided to hold but one business session each day, from 9 A. M., until 3 P. M. He also announced that the President of the United States would be happy to receive, with those members of the Association who might call at the Executive Mansion at 8 o'clock in the evening, such ladies as may accompany them.

On motion, the Association confirmed the appointment of Dr. J. M. Snyder to fill a vacancy in the Committee of Arrangements.

On motion, it was decided that a nominating committee of one from each State represented, should be raised, the delegation of each State selecting its representative therein. A brief discussion upon the propriety of permitting the Army and Navy delegations to appoint separate members of the committee was decided by the President in favor of their having the privilege, and the decision was sustained by the Association.

There was then a recess of fifteen minutes, during which the different delegations assembled in various parts of the lecture-room to choose their representatives in the committee. After the meeting was again called to order, the Secretary read the list as follows:

*Committee of Nomination.*—Job Holmes, of Maine; Geo. H. Hubbard, New Hampshire; P. Pineo, Vermont; Ebenezer Alden, Massachusetts; Ashbel Woodward, Connecticut; J. Mauran, Rhode Island; H. D. Bulkley, New York; J. P. Colman, New Jersey; Isaac Hays, Pennsylvania; H. F. Askew, Delaware; P. Smith, Maryland; Noble Young, District of Columbia; A. S. Payne, Virginia; W. H. McKee, North Carolina; Wm. T. Wragg, South Carolina; Joseph P. Logan, Georgia; J. T. Hargraves, Alabama; R. J. Breckinridge, Kentucky; J. Berrien

Lindsley, Tennessee; Wm. M. McPheeters, Missouri; George Mendenhall, Ohio; Calvin West, Indiana; A. H. Luce, Illinois; Zina Pitcher, Michigan; Thomas O. Edwards, Iowa; O. Harvey, California, and Geo. Clymer, United States Navy.

On motion, Drs. Bohrer, of D. C., Flint, of New York, and Hargraves, of Alabama, were appointed by the President a Committee on Special Essays.

Dr. David M. Reese, of New York, presented and read a written apology for having recommended for a position in Blockley Hospital, Philadelphia, Dr. McClintock, who had been expelled from the Association for a violation of the ethics and the etiquette of the profession, by publishing a work on "domestic medicine," &c.

On motion of Dr. Condie, of Philadelphia, the apology was accepted, and ordered to be entered upon the minutes.

Dr. Bryan, of Philadelphia, who had also recommended Dr. McClintock, made a verbal adoption of Dr. Reese's apology, the reception of which was warmly debated. Dr. C. C. Cox, of Maryland, opposed, and Dr. Condie advocated the reception. Dr. A. B. Palmer, of Michigan, moved the previous question on a motion to refer the subject to a committee, which was lost. The apology of Dr. Bryan was then accepted.

The President then delivered, in a clear voice, and with a pleasing oratorical effect, his Annual Address.

On motion, the thanks of the Association were voted to the President for his able and instructive address, a copy of which was solicited for publication.

Dr. Grafton Tyler, of Georgetown, D. C., chairman of the Committee on Prize Essays, reported that the essays received were three in number, each of which had been examined with great care; considering, first, the intrinsic merits of each essay, and then their merits in relation to each other. The first prize was awarded to "An Essay on the Clinical Study of the Heart Sounds, in Health and Disease," bearing the motto: "*Clinica clinice Demonstrandum.*" The second prize was awarded to "An Essay on Vision and some of the Anomalies as rendered by the Opthalmoscope," bearing the motto: "*Dux hominum medicus est.*"

Dr. Tyler then proceeded to open the sealed envelopes bearing the above named mottoes, and containing the names of the writers of the Essays. The first was written by Dr. Austin Flint, of Buffalo, N. Y.; and the second by Dr. Montrose A. Pallen, of St. Louis, Mo. This is the second time Dr. Flint has won this distinguished honor, and the third time that it has been awarded to Buffalo since the Association was organized, eleven years ago.

On motion, the report of the Committee was accepted and adopted. Drs. Flint and Pallen were then invited to give *resumes* of their essays, which they did.

Dr. Lindsley, from the Committee of Arrangements, then presented an invitation from Dr. Nichols to visit the Insane Asylum, and another from Rev. Mr. McGuire, to visit Georgetown College.

On motion of Dr. Hamilton, of New York, these invitations were accepted, and the thanks of the Association were returned therefor.

On motion of Dr. Lindsley, the Hon. Doctors Fitch, of Indiana, Chaffee, of Massachusetts, Clawson and Robbins, of New Jersey, and Shaw, of North Carolina, members of Congress, and Dr. Peter Parker, ex-commissioner to China, were elected "members by invitation," and requested to participate in the proceedings of the Association.

On motion, Assistant Surgeon Frederick A. Rose, of the British Navy, who so nobly volunteered his services on board the United States ship Susquehanna, at Port Royal, and who came in her to New York, devoting himself to the sick crew, was unanimously elected a "member by invitation," and invited to take a seat on the platform. It was announced that Dr. Rose had left the city.

Dr Francis G. Smith, of Philadelphia, chairman of the Committee on Publication, made his report, showing the expense of publishing the annual volume.

Dr. Caspar Wistar, of Philadelphia, presented his annual report of receipts and expenditures, showing a balance on hand of $806. Accompanying the Treasurer's report was a resolution providing that the back volumes on hand, when over two years old, shall be sold at two dollars a volume, and that vols. V, VII, VIII and IX, of which there are a surplus, be sold at $5 a set to any member.

The special committee on Medical Education, of which Dr. G. W. Norris, of Philadelphia, is chairman, were called upon to report. There was no response, and, on motion, the subject was referred to the Committee on Nominations.

Dr. A. B. Palmer, chairman of the Committee on Medical Literature, asked leave to defer his report until Wednesday, at 10 o'clock, which was granted.

A report was made by the Committee on Nominations; which was accepted; and the Association then elected the following Officers:

President, Dr. Harvey Lindsley, of Washington City. Vice-Presidents, Drs. W. L. Sutton, of Kentucky; Thos. O. Edwards, of Iowa; Josiah Crosby, of New Hampshire; and W. C. Warren, of North Carolina. Secretary, Dr. A. J. Semmes, of Washington City. Treasurer, Caspar Wistar, of Philadelphia.

On motion, Drs. Flint, of New York. Gross, of Pennsylvania, and Gibbes, of South Carolina, were appointed a committee to conduct the President elect to the Chair.

Dr. Lindsley, having been introduced to the Association by the retiring President, Dr. Eve, made a few pertinent remarks acknowledging the honor as the highest he had ever been called upon to receive, and the highest that any medical man in America can receive. Unaccustomed to preside over so large a body, and having had but little practice in presiding over smaller assemblages, he must throw himself upon the forbearance of the association, and look to the members for support in the discharge of his official duties.

On motion, the thanks of the Association were voted to the retiring officers for the able and impartial manner in which they have discharged the duties of their respective offices.

On motion, the ex-Presidents of the Association present were invited to take seats on the platform.

The committee on Medical Topography and Epidemics was called by States. A paper from the member from Maine stated that he will report next year. There was no response from New Hampshire, Vermont, Rhode Island, Connecticut or Massachusetts. Dr. Smith, of New Jersey, read an able report on New Jersey, and the Association then adjourned until to-morrow morning at 9 o'clock.

*Second Day*—The Association was called to order by the President, Dr. Harvey Lindsley, and the Secretary read the minutes of the first day's proceedings, which were adopted.

On motion of Dr. Watson, of New York, Dr. Delafield, of New York, one of the first officers of the association, was invited to take a seat on the platform.

On motion of Dr. Atkinson, of Virginia, an amendment to the constitution was received, providing that no person shall be recognized as a member, or admitted as a delegate at meetings of the association who has been expelled from any State or local medical association until relieved by action of such State or local association.

Dr. Atkinson supported the adoption of this amendment in an eloquent speech, contending that the admission of any gentleman who has been rebuked by any State or local association, and is under its ban, is a rebuke to that association. He urged the acceptance of the amendment, and trusted that until the constitution be so amended it shall be the rule of action.

Dr. Bond, of Maryland, asked to have the qualifications requisite for a seat read. He desired information as to the ethical qualifications for membership.

Dr. Watson, of New York, stated that, as by the constitution it was necessary to have amendments lie over one year, this was not a question for present debate.

The President decided that debate was not in order, and the amendment was accordingly laid on the table for consideration at the next annuel meeting.

Dr. Boyle, of the committee of arrangments, proposed the names of Doctors Huff and Night, who were elected "members by invitation.

Dr. A. B. Palmer, of Michigan, chairman of the committee on medical literature, made an able and interesting report.

On motion, the report was accepted, and ordered to be published.

On motion, Dr. Bozeman, of Alabama, was elected a "member by invitation.

## REPORT ON MEDICAL EDUCATION.

Dr. James R. Wood, chairman of a special committe on medical education, made a lengthy report, discussing; 1st, primary medical schools; 2d, the number of professorships in medical colleges; 3d, the length and number of terms during the year; 4th, the requisite qualifications for graduation; 5th, such other subjects of a general character as to give uniformity to our medical system. Having reviewed these propostions at length, the committee have arrived at the following conclusions.

*First* Primary medical shools should be encouraged; but, as office in instruction will continue to be sought by students, practitioners should either give them necessary advantages of demonstration, illustrations, and recitations, or if not prepared to do so, they should refer them to such primary shools, or medical men, as will give them proper insruction.

*Second.* The number of professorships should not be less than seven, viz.: a Professor of Anatomy and Microscopy, Physiology and Pathology, Chemistry, Surgery, Practical Medicine, Obstetrics, and Materia Medica.

*Third.* There should be but one term annually which should commence about the 1st of October, and close with the March following, thus lengthening the term to six months. The commencement of the term, in October, should be uniform in all the colleges throughout the country. During the session their should never be more than four lectures given daily.

*Fourth.* The qualifications for graduation, in addition to those now required by the schools, should be a liberal primary education, and attendance upon a course of clinical instruction in a regularly-organized hospital.

In order to give our medical colleges an opportunity to consider the recommendations here advanced, and that this body may have the advantage of their wisdom and their mature views, before any definite action is taken upon them, your committee submit to the association the following resolutions:

*Resolved,* That the several medical colleges of the United States be requested to send delegates to a convention to be held at on the day of for the purpose of devising a uniform system of medical educaiton.

*Resolved,* That the present report of the special committee on medical education be referred to such convention for its consideration.

*Resolved,* That said convention of delegates from the several colleges of the United States be requested to submit to the meeting of this association in May 1859, the result of their deliberations.

On motion, the report was accepted and referred to the committee on publication, the accompanying resolution be laid on the table.

The committee on nominations reported Louisville, Ky., as the place of meeting in 1859, and nominated Dr. S. M. Bemis, of that city, as second Secretary. They also nominated the standing committees.

*Committee on Publication*—Dr. F. Gurney Smith, Pa., Chairman; Drs. Caspar Wistar, Pa., A. J. Semmes, D. C., S. M. Bemis, Ky., S. L. Hollingsworth, Pa., S. Lewis, Pa., H. F. Askew, Del.

*Committee on Medical Literature*—Dr. John Watson, N. Y., chairman; Drs. L. A. Smith, N. J., C. G. Comegys Ohio, R. W. Gibbs, S. C., W. M. McPheeters, Mo.

*Committee on Prize Essays*—Dr. J. B. Flint, Ky., chairman; Drs. M Goldsmith. N. J., H. Miller, Ky., Calvin West Ind.

*Committee on Medical Education*—Dr. G. W. Norris, Pa., chairman; Drs. A. H. Luse, Ill., E. Henderson, S. C., G. R. Grant, Tenn., T. S. Powell, Ga.

*Committee of Arrangments*—R. J. Breekinridge, Ky., chairman; Drs. G. W. Ronald, B. M. Wible, D. W. Goodall, D. D. Thompson, N. B. Marihall, G. W. Burglass, R. C. Hewett and A. B. Cook, all of Kentucky.

The report was accepted, the nominations were confirmed, and the committee received permission to sit again.

On motion of Dr. Hamiltion, of Baffalo, the resolutions attached to the report of the committee on medical education were taken from the table.

Dr. Watson moved the appointment of a committee to consider the resolutions and report to-morrow morning.

Dr. Bond thought that the subject had already been sufficiently discussed. It had been brought up year after year, occupying much of the time of the association, and he trusted that it would receive immediate consideration.

Dr. Davis, of Illinois, wished, to have the subject made a special order for some time prior to the adjournment of the convention.

Dr. Rogers, of New York, wished to have the report printed, that all might have an opportunity of examining it and the propositions which it embodies.

Dr. Wood defended his report as a conservative report, just alike to the profession and to the laymen. He did not believe that any good could arise from a further discussion of the subject. None has arisen in years past—none could arise now. It was a bill of conciliation and of adjustment. Laymen of the profession merited censure for sending men to college not qualified for the profession, and colleges merited censure for sending men out not qualified to practice the healing art. He approved of the motion of Dr. Watson, that the report be submitted to a committee of delegates from colleges.

A debate on a call for the previous question on Watson's resolution then ensued, in which several gentlemen joined, each one apparently having a different idea of "parliamentary law," and neither of them displaying a very correct knowledge of the subject. It was remarked by an old member of the association that "parliamentary discussion must be a *local epidemic.*"

The report was finally referred to a select committee, to be composed of one member from each delegation representing a medical college or school.

On motion, thanks were voted to the late secretary, Dr. Foster and his succesor, Dr. Bemis, took his seat.

Dr. Hamm, of Pennsylvania, moved a suspension of the rules for the purpose of reconsidering the resolution of Dr. Condie, accepting the apology tendered by Dr. Bryan. The vote upon suspending the rules stood —ayes 111, noes 82. The President ruled that a two-thirds vote was necessary, and decided the question as lost.

An appeal was taken from the decision of the chair, and the decision was not sustained. A vote was then taken, and the resolution accepting the apology of Dr. Bryan was reconsidered by a vote of—year 142, nays 70.

An attempt was then made to connect the resolution with that accepting the apology of Dr. Reese, but it was decided that it would first, be necessary to dispose of the resolution reconsidered, and it was laid on the table.

A member from New Jersey hoped that the McClintock case would be brought fairly and squarely before the association, and that gentlemen would be made to "face the music." It was useless to cloak it, or attempt to dodge the responsibility.

Dr. Beck, of Indiana, moved an indefinite postponement of the whole subject.

Other gentlemen rose to speak, but the President decided that a motion to postpone was not debatable.

Dr. Jewell rose to a point of order, and protested against being "gagged." [The President here reversed his decision.] Dr. Jewell said that the action of the day previous was regretted, and that gentlemen had acted hastily. Many, who voted at first sight to accept the apologies, now regretted having done so.

Dr. Hamm, of Philadelphia, explained the action of the Philadelphia County Medical Society, and began to read a remonstrance from it, which he desired to incorporate into his speech.

Dr. Biddle objected to the reading of this remonstrance, as a violation of plighted faith.

It was here moved and decided that the association go into "committee of the whole,". and Dr. Edwards, of Ohio was called to the chair

A member hoped that there would be no rules of order except what the chair would prescribe.

*The Chair.* "I will prescribe enough."

Another member inquired if it would be proper to discuss the remonstance ? *The Chair.* "A gentleman who has the floor can discuss anything on the face of the earth.

The remonstrance was then read. It was a long document, giving a detailed account of the recommendation by Dr. Reese of Dr. McClintock for a position in Blockley Hospital, after the last-named gentleman had been guilty of selling quack nostrums, and had thus committed an offence against the ethics of the profession.

Dr. Humphries, of Indiana, moved that each member of the committee of the whole be restricted to five minutes, allowing Dr. Reese whatever time he wished to defend himself in.

Dr. Phelps showed that a ten-minutes rule was now in force. Dr. Cox moved, as an amendment, to make the time fifteen minutes; which amendment was lost, and the original motion of Dr. Humphries was then carried.

Dr. Reese then ascended the platform, and made a statement of his position from the commencement of the controversy. He considered his apology of the day previous a satisfactory one, but was willing to make it more so if it was objected to. He had not brought the subject before association; but had been given to understand that if he made the apology which he made, the remonstrance would not be offered. During his remarks there was a demand for the reading of the apology; which was read, as follows:

*To the Officers and Members of the American Medical Association:* The undersigned, one of the Vice Presidents of the American Medical Association, having, during the interval since our last annual meeting, certified to the professional fitness for the charge of the Blockley Hospital, at Philadelphia, of an individual who had been expelled from this body for a violation of our code of ethics, after consultation with the other officers, and yielding to the advice of other personal friends, desires to say to the association now assembled—

1st. That, in giving said certificate, he was prompted solely by motives of sympathy and humanity to a fallen brother, who had been a personal friend prior to his offence; and that he did not realize, acting under the impulse of the moment, that his individual act could be construed by the profession as indicating hostility to his brethren.

2d. That while his own mind is clear that the certificate contained only the truth, and that, under his peculiar relations to the party concerned, he could not withhold his certificate, of medical qualification, consistent with conscience and duty, yet he is ready to concede that he had no abstract right to relieve the party from the censure of the association until this body had restored him to his fellowship.

3d. That, so far from intending any disrespect to the association or to its act of discipline, the undersigned had publicly sustained and defended both. He therefore disclaims the inference from his certificate that he intended to recommend to a high professional office a man whom the association had excluded, and thereby nullify the action of this body.

And, finally, with these statements and disclaimers, the undersigned, while retaining his own opinion of the rectitude of his motives, and of his duty, under the peculiar circumstances of the case, is nevertheless prepared to defer to the judgment of those whom he knows to be his friends, that he erred in doing what he had no right to do, in view of his official position in the association, and is hence called upon to offer this explanation and apology to his brethren.

(Signed) DAVID M. REESE.

It was moved to refer the apology and remarks of Dr. Reese to a special committee of seven, to report to-morrow morning. Dr. Atlee, of Lancaster, and other gentlemen urged delay.

Dr. Payne, of Virginia, asked permission to relate an anecdote. He was reminded of two old Quakers, one of whom kept a store, while the other practised law—both were members of a temperance society, and it was generally thought that the lawyer did not always keep his pledge.—One wet, cold day, a negro man went to the Quaker's store, and the good man gave him a drink of brandy. This was brought to the notice of the temperance society, and it was decided that the offender should be severely reprimanded. The lawyer was selected to carry out this sentence, and, taking the storekeeper into the woods, he thus addressed him: "Jeemes, thee should be more circumspect!"

Dr. Condie, of Philadelphia, wished to say that he had offered the resolution in good faith, but he denied that he had made propositions to the gentleman from New York, or that the Philadelphia committee had.

Dr. Bowling of Tennessee, said that there was no question of veracity. Gentlemen on either side were correct. He had heard of misunderstanding, and of probable difficulty, and had earnestly endeavored to arrange it. He had told Dr. Reese that if he made an apology, the remonstrance would not be presented, because he had understood gentlemen from Pensylvania to say so. But he was now aware that these gentlemen did not, in any way pledge the Philadelphia county medical society.

Dr. Condie hoped that a committee would be appointed to give the subject a careful consideration.

Dr. Cox, of Maryland, after complimenting Dr. Reese as an able practitioner and an experienced editor, whose labors have been of great value to the profession and to the country, said that he did not consider the statement full and satisfactory. The offence was not an unpardonable one, but the violation of that code of ethics which is the life of the profession should be properly atoned for. The apology was good enough, but it carried as its sting the mental reservation which Dr. Reese persists in Nay, in his journal, issued simultaneously with this meeting, and circulated here, he says: "Having done right in certifying to the labors of our quondam friend McClintock, we resented the unmerited censures of our Philadelphia brethren." This completely stultifies the effect of the apology.

Dr. La Roche, of Philadelphia, explained his action and that of the Philadelphia county society in the matter.

Dr. Payne, of Virginia, Dr. Cox, and Dr. Bond made some rather sharp remarks. Dr. Davis, of Massachusetts, thought that Dr. Reese had but to admit that he had done wrong, and ask pardon without any mental reservation.

Dr. Reese said that he intended to make a satisfactory apology. Such was his earnest wish and desire, and he wished to frankly state that he had no mental reservation, neither did he attempt to conceal anything.—He made the statement that had been read without reservation and without evasion.

Dr. Condie expressed his entire satisfaction, as did numerous other gentlemen, several crossing to where Dr. Reese was sitting and shaking hands with him.

The committee of the whole then rose, and the chairman reported to the President that the committee had heard and discussed the apology of Dr. Reese, and that they considered that it was "ample, full, complete, and satisfactory."

On motion, the report of the committee was received and adopted.

The case of Dr. Bryan then came up, when it was suggested that his apology should be in writing, he expressed a willingness to make one as ample as was that of Dr. Reese.

Dr. Reese then drafted an apology, but several gentlemen insisted that he should insert the word "regret." Dr. Reese declined, saying that no gentleman would apologize for that which he did not regret, and that he would never be dictated to by any gentleman, even if the prison door stood open on his right hand, and the stake at his left.

Dr. George B. Wood (who was greeted with loud applause) stated that he had been with the side which has offered the apology, but he did not consider the apology complete, without the insertion of the word "regret."

Drs. Bonner, Clark, of New Jersey, Hard, of Illinois, Parker, of New York, and other gentlemen participated in an exciting debate on the necessity of having the word "regret" inserted.

Dr. Reese added the following sentence: "and regrets that he has incurred the displeasure of his brethren." This was not favorably received.

At length he presented the following:

"The undersigned regrets that he certified to the professional qualifications for Blockley Hospital, Philadelphia, of an expelled member of this body, and hereby offers this apology for his departure from the ethical code."

This was received with loud applause, and, on motion of Dr. White, accepted as an ample and satisfactory apology.

Dr. Bryan submitted a similar apology, which was also accepted, and the association adjourned, evidently well pleased that this question was finally disposed of.

*Third Day.*—The President, Dr. Lindsley, called the association to order at half past nine o'clock. The Secretary not having his minutes in readiness, the reading of the minutes of the day previous was dispensed with.

Dr. Grant, of New York, asked leave to present a complaint against the New York Medical College, but upon information by Dr. Edwards that a committee on ethics would be recommended by the nominating committee, he withdrew his request.

The minutes were then read. Several proposals to amend them were made, and either ruled out of order or withdrawn.

The appointment during last year of Dr. Geo. Haywood, of Boston, as a delegate to represent the American Medical Association in kindred societies in Europe, was announced by Dr. Eve.

The remainder of the proceedings of the American Medical Association will be found in the next number.

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## Receipts.

Drs. A. T. Cheatham, Ga., 3d vol.; A. G. Couch, Ga., 3d vol; D. S. Brandon, Ga., 3d vol; B. F. C. Bonner, Ga., 3d vol; R. J. Stewart, Ga., 3d vol; —— Hollinsworth, Ga., 1st, 2d and 3d vols; J. N. Coe, Ga., 2d and 3d vols; L. W. Davis, Ga., 3d vol; L. J. Dupree, Ga., 3d vol; R. W. Herbert, Ga., 3d and 4th vols; N. S. Liddell, Ga., 3d and 4th vols; C. F. Robinson, Ga., 3d and 4th vols; J. E. G. Terrill, Ga., 4th vol; E. C. Haws, Ga., 3d vol; J. B. Turner, Ga., 3d vol; A. M. Wilkins, Ala., 2d and 3d vols; —— Hendricks, Ga., 2d vol; C. H. Phifer, Ala., 3d vol; John Stone, Ga., 3d vol.

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# ORIGINAL COMMUNICATIONS.

## ARTICLE 1.

*Total Ablation of the Inferior Maxilla, executed with success.* By M. Maisonneuve, Surgeon to the Hôpital de la Pitié. Paris, 30th of June, 1857.

**Translated by T. A. Means, M. D., formerly of Georgia, now of Memphis, Tenn.**

"For several years past, the total ablation of the Inferior Maxilla was considered so dangerous an operation, that no French Surgeon dared to attempt it. Besides the extreme difficulties to be anticipated in the mere performance of the operation, in the neighborhood of both the internal and the external carotids, and the dangers to be apprehended from obstructed respiration, one was persuaded that after the mutilation of the tongue and its intimate attachments, anteriorly, it would necessarily be drawn backwards, towards the thorax, and thereby produce suffocation.

It was also believed—supposing the cure a probable one—that such a mutilation would leave the patient in a most lamentable condition, depriving him both of speech, and the power of mastication. Such was the general opinion when in the fall of 1853, I presented to the Académie, a young girl upon whom I had practiced a total ablation, and from which none of the accidents spoken of above, occurred. On the contrary, the most happy results were obtained.

In the summer of 1856, I had occasion to perform anew, the same operation upon a young man, whom I afterwards presented to the Académie. In this, as in the preceding case, the operation was rapid and easy, and no accident intervened to prevent a speedy cure. The features were preserved in form and regularity—phonation was full and natural, and with the aid of a set of artificial teeth, he can chew the most solid food. He now occupies a position as counting master, in an iron manufactory in Spain. As an operation of such severity had thus been twice performed, it might be supposed that that circumstance alone would enable us to lessen the inconveniences and dangers attendant upon it. Neither the one last mentioned, however, nor the one now under consideration, have any striking features which demand special notice, and I shall add nothing of importance to what has been already furnished. The three cases taken together, however, so completely establish the practicability and safety of the operation, as to need no further confirmation, and may serve as an index from which results of the highest consequence may hereafter be obtained.

On the 23d of June, 1857, a young girl, aged 18 years, named Matilda S———n, came to consult me, in company with her mother, in relation to a voluminous tumor, situated upon the lower jaw. Its first development had scarcely been perceived, nor considered of much moment, yet within two months its growth became so rapid, that it caused her much alarm; but owing to the limited circumstances of the family, she could not consult a physician. At the end of twelve months she entered the hospital. The development of the tumor was so rapid, that it had already embraced the whole of the right side, involving, to some extent, the superior third of the ramus, and upon the left, had reached a point on a line with the three molars. It was the seat of lancinating pains which came on at intervals of three or four hours—the teeth were complete, save the first molar, (left,) which had been partially withdrawn: the soft parts were perfectly healthy.

After a thorough examination, I was convinced that the seat of disease was in the osseous tissue itself; that there would be consequently serious inconveniences if left to itself, or if a section only were made, there would, in all probability, be a return of the disease in a more aggravated form. Besides, if the small portion of the healthy bone were left, it would be of little use to the patient.

Considering all these inconveniences, I proposed to remedy the existing evil by a total disarticulation, to which the mother of the girl consented. The operation was performed 30th June, viz:

1st. After the usual anesthetic (chloroform,) was given, and *partial* anasthesia produced, (for I was fearful if *complete*, strangulation by blood would ensue;) I made a vertical incision upon the median line from the superior margin of the lip (inferior,) *to the bone* in front, and two inches down the margin of the genio-hyoideus muscle.

2d. By means of a chain saw, I divided the bone on a line with the symphysis, thus enabling me to establish with certitude, the nature of the disease.

3d. With the point of my bistoury, I separated rapidly the periosteum with the ends of my fingers, and when reaching the muscles, (masseter and pterygoideus) I tore them violently, and in like manner the dental nerves and vessels.

5th. With the point of my curved scissors, I cut the still adherent cartilaginous insertion of the pterygoideus muscle, at its sphenoid origin.

6th, and lastly. By a brisk rotary movement, I disarticulated the bone, tearing all the articular ligaments of the internal pterygoideus muscle.

The first act of the operation having been completed, I then proceeded to disarticulate the left side, which was executed rapidly, and in like manner. What was most remarkable, after the operation I had not the least occasion to use the ligature. The pterygoid and masseteric branches of the facial artery, together with all the smaller arteries in that region, did not emit so much as *a drop of blood.* The inferior labial, and coronary arteries, which were necessarily divided by the first incision with the bistoury, ceased to bleed almost immediately—at least, some time before completing the operation, and entirely so, upon bringing the two halves in juxtaposition, by the twisted, or figure of 8, suture. The tongue, retained by its insertion to the periosteum, had not the least tendency to fall back into the thorax, and the movements of deglutition commenced ten hours afterwards. In fine, no accident intervened, and the cure was complete fifteen days afterwards.

Six weeks from the date of the operation, the features had recovered their form and regularity; and, save mastication, all the other functions of the mouth were performed as if the patient had never undergone the operation.

Remarks—by the translator.

Here are three cases of a total ablation of the inferior maxilla, followed by the most happy results, and totally exempt from accident and deformity, which heretofore have been so much dreaded by the surgeon. Convinced, therefore, of the value of the foregoing *facts*, by personal observation, I venture the following conclusions:

1st. That the total ablation of the inferior maxilla may be performed with safety, and unattended with inconveniences and dangers.

2d. That it does not hazard any important function.

3d. That it does not necessarily produce a sad deformity.

4th. That all the soft parts may be preserved "in situ," and by the new osseous deposit from the periosteum—as indicated by the Professor—secure to the patient *geneives* of sufficient firmness to answer all practical purposes.

5th. That it should merit—in this respect—a position in surgery as a regular operation.

I witnessed the operation reported, as well as watched the progress of the cure from the following morning until 22d of August, at which time the patient quitted the hospital.

The young girl in question is a brunette, of delicate frame, but of good constitution, with features regular and rather handsome. The Professor, when commencing the operation, stated his intention to disarticulate both extremities without making an incision, but he found, after having dissected back the periosteum on each side to the first molars—that the mouth was not possessed of sufficient elasticity to admit of further extension.

He resolved, therefore, to make one perpendicular incision instead of the crucial, or arched, as indicated in the books.—The bistoury was used only in the first incision, the remainder of the operation was performed with the ends of his fingers. All the smaller arteries, consequently, bled but little, and the hemorrhage observed was altogether venous—Anasthesia ceased within five minutes after the first stroke of the bistoury, and the patient submitted to the remainder of the operation without a murmur.

I should remark, that the operations mentioned were performed after the method *sons periostique*, the principles of which were first advanced and claimed by M. Flourens.

No other method would admit of an execution so rapid, and at the same time so secure; none similar, in which the hemorrhage can be so easily arrested, and none in which the tongue and inter-maxillary muscles can be as effectually supported, to say nothing of the probability of securing a new osseous deposit between the two laminæ of the periosteum of sufficient firmness to admit of a set of artificial teeth and render mastication easy and complete, beside bringing back the features almost to their natural state. The only incision made by M. Maisonneuve in all operations upon the lower jaw, whether of resection or ablation—is the perpendicular, as described—and has decided preferences over the angular or curved, first practiced by Dr. Deadrick, of this State, Tennessee, in 1810—two years after, by Dupuytren, and then by Cusack, Liston, Syme and Fergusson, of the British schools.

The advantages gained are, *first*, less liability of harming the parts torn by the action of the muscles, (masseter and buccinator)—*second*, less inflammation of the parts adjacent, and *third*, less deformity. With these preferable features—in operations requiring such skill and precaution—we would ask from the profession that impartial consideration which the importance of such a method demands.

I witnessed four partial excisions of the lower jaw in the same service; in each of which the periosteum was preserved, and so early as the fifth day, it had become firm and smooth; the cicatrix, down the margin of the genio, hyoideus muscle, was regular, and scarcely perceptible, while the jaws were round and full.

Three others, I had also the pleasure of witnessing, upon the superior maxilla; two for scirrhous tumors situated upon the right side embracing the full space between the malar bone and a line corresponding with the second incisor, while the third occupied the left, involving two-thirds of the entire bone; all of which was extracted, leaving exposed the tongue, a portion of the hyo-glossus muscle, the soft palate and all the teeth of the lower jaw—save the last molar.

These incisions were left open for the space of one month, and towards the sixth week, both patients quitted the hospital, having had adjusted, each, an artificial jaw of gutta-percha.

I witnessed, also, two total and one partial amputation of the Tongue for cancerous affections, by the same Surgeon, with his *ecraseur lineaire*, and in no case was the result unfavorable.

I mention these, to show the success which has followed each operation, notwithstanding his boldness and excessive thirst for *les maldies des Mâchoires.* In many respects, he is rough, and performs an operation as if foreman of a slaughter house, in consequence of which, he has received the sobriquet of *Chirurgien de l'Abattoir.*

## ARTICLE II.

*Healthfulness of Atlanta.* By F. D. Thurman, Dentist, Atlanta, Georgia.

Many fortunes have been spent and families reduced to want, in endeavoring to discover perpetual motion, and yet it is not discovered. Its aspirants will occasionally look cheerful and sanguine, with intermediate turns of gloom and despair.

For a time, it seems that the long levers must rule the short ones, and he is obliged to succeed. But, after he spends a few more years in close application and the pleasures of anticipation, he begins sorrowfully to see that nature's laws are so well balanced, that every fraction of power gained in one part of the machine is exactly balanced by a loss of time in another part, and *vice versa.* He is now ready to agree with the Poet, that—

> "The world is harmoniously confused."

And thus it is, all things in nature are subject to advantages and disadvantages. The North has the advantage of the South, in not being perplexed with slaves. The South has the advantage of the North in having negroes to work for them. One man has the advantage of education, another of honesty, another enjoys both, another is deprived of both. One city has the advantage of navigable streams, another of railroads, another of both, and another is deprived of both. One enjoys wealth, another is blest with health.

Now the city that enjoys the greatest number and weight of advantages is most to be desired. As to the railroads of Atlanta, comment is unnecessary, they speak for themselves. But I think that its healthfulness is too often overlooked.

Health is the greatest blessing that mortal man can enjoy; deprive him of health, and you deprive him of all the sweets of life. Though other blessings may be heaped in profusion upon him, they afford no consolation. These are facts that all are ready to admit, yet few practice upon them. We seldom think of taking care of ourselves, until there is nothing left of us worth taking care of. But to those who appreciate the value of a healthy situation, I would say come to Atlanta; where all classes prosper except Physicians, and even they enjoy the privilege of exulting over their rosy cheeks.

Atlanta is situated on seven hills, with seven or more springs rising within the corporation, and flowing off in *every direction*, some being gathered around to one side, wend their way to the Atlantic; whilst others flowing North, South and West, seek their level in the Gulf of Mexico. Though the city is well watered with springs, not a solitary stream, not even of the smallest size, passes through or near any part of it that does not rise inside of the corporation line. All of this, of course, shows an elevated situation.

The hills are so beautifully rounded off that instead of marring, they add greatly to the beauty of the place. They are so well shaped that notwithstanding they are flat enough for beauty, they are round enough not to leave a solitary spot on the hills or in the valleys for the retention of stagnant water; but the city is literally washed by every rain.

Our well water is all good; nearly every man will tell you that his water is really the best in town.

Our atmosphere is pure and healthful, and as Professor Means says, "We are too high up for malarious diseases, such as fevers of various kinds, and too low down for mountainous diseases, such as consumptions, rheumatisms," &c. In fact, I might say that we labor under but one disadvantage, and that is not a permanent one. It is a well known fact that in all of our populous cities, the poor classes (owing to causes not necessary to be mentioned here) are always more subject to diseases, than the more wealthy. To this defect we plead guilty. I suppose that no city of the same size has a greater proportion of those who are not supplied with worldly goods. But notwithstanding this disadvantage, surprising to say, our mortality is computed at only one and a half per centum per annum, including rail road accidents.

And as I remarked above, this defect is not a permanent one; we are growing rich; and the rich are moving in for their health; and oh! how I love to hear the latter speak of their dear little children, which a short time since were brought here with pale, sickly faces, and now blooming with health.

All these are stubborn facts, and all speak well of our thriving city, which has grown contrary to the expectations of every one, and in my humble opinion is destined ere long to increase their surprise to astonishment. More anon.

# ARTICLE III.

*Report of a Case of Monstrosity.* By J. E. G. TERRILL, M. D., of Greenville, Georgia.

Some two or three months since, I was called to see a negro woman, (the property of Jeremiah Frazier, of Meriwether County), said to be in labor. After an examination, I found it was not her full term. I prescribed accordingly and prevented the abortion, since which time she has been able to attend to her usual work in the farm, up to May 5th, about 11 o'clock, when she was taken in labour and progressed regularly with the exception of a slight hemorrhage, until 3 o'clock, P. M.; at which time she gave birth to a singularly developed child, a description of which I will endeavor to give as accurately as possible. I have it before me. The head is regularly formed, with quite a sufficiency of hair; likewise are the upper extremities and chest. The abdominal walls are wanting, with the exception of a small space above the pubes.—The liver and intestines are exposed fully to view, hanging loosely, and retained *in situ* by the reflections of the peritoneum. The lower extremities are reversed. They fold upon the back, instead of the abdomen. The anterior portion of the legs are the posterior portion in this case. The os calcis is in front, the toes pointing backwards. The great toes are upon the outside of the feet—the feet are flat, being made so doubtless from their position upon the occiput while in utero. It is strictly neuter gender—as it has no signs of the genitals of either male or female—the parts are perfectly smooth. The anus is above the os pubis, just below the margin that surrounds the viscera of the abdomen. The bladder is not visible. The spine is considerably distorted. Its weight is about seven pounds. It is hardly necessary to say it was still-born. The mother is doing well. I have thus given an outline of the monstrosity which I set out to do as near as possible, without going into particulars. I have not made any dissection of it at all, as I wish to preserve the specimen, and present it to the Museum of the Atlanta Medical College.

## ARTICLE IV.

*Retention of Urine, with Treatment.* By Wm. Abram Love, M. D., Palmyra, Lee County, Georgia.

In an article copied into the *Southern Medical and Surgical Journal*, for 1850, p. 759—coming indirectly from *L' Union Medicale*, M. Cazenave recommends (*as a new method of relieving retention of urine*), the use of ice and ice water, to be thrown into the rectum and applied to the perineum—the object of which, was to relieve the engorgement of the prostate gland—(the cause of the retention)—and as a stimulus to cause contraction of the bladder.

This treatment, though it may have been *new* with M. Cazenave, and doubtless original, was nevertheless practiced by my preceptor—the late Dr. Samuel George Morton, of Philadelphia—long before the appearance of M. Cazenave's article, and was by him recommended to his private students, while I was in his office in 1845–6. How long it had been his practice, I know not. *He did not present it as new then*, but stated that he had been in *the habit of resorting to this treatment.* He furthermore cautioned his class to be careful in the use of cold in cases where it would be likely to act too powerfully as a sedative, as in the cold stages of Intermittents—in the advanced stages of low forms of fever where the vital forces were very much depressed, &c.

I do not know when M. Cazenave first adopted this treatment, nor do I know when Dr. Morton commenced this practice, but I do know that he spoke of it, and recommended it as *his practice* as early as 1845. I feel that it is but justice to make this statement before giving my own experience in a different mode of affecting the same object, into the discovery of which, the practice of Dr. Morton, accidentally led me.

In the Spring of 1848, I was much annoyed by retention of urine in the case of a little patient—six months old—then suffering from a protracted attack of a low form of fever. The urine had for some time been voided with difficulty—the vital forces were very much reduced—the bowels, though very much disposed to *run off*, had become greatly distended with gas, when complete retention of urine ensued. In the progress of the case, the bladder became very much distended, when the ordinary remedies recommended in such cases were resorted to, but without giving relief. Not being provided with a suitable catheter, I determined to risk the cold injections and cold applications. With this intention, the nozzle of a self-injecting pump was passed into the rectum—it becoming accidentally detached from the pump-tube, leaving the outer extremity free—a quantity of gas escaped from the bowels, and to my gratification, the discharge of gas was followed by a free flow of urine. I returned the tube nozzle to the rectum again the following morning, and repeated it the next evening with a like result; after which time the bladder discharged its contents without artificial aid.

The result of this course led me to conclude that the retention depended upon a triple cause.

1st. Passive congestion of the prostate gland.

2nd. Mechanical pressure upon the same from distention of the rectum and other abdominal viscera; and,

3rd. Partial loss of tone in the bladder itself.

The discharge of the gas removed the mechanical pressure from the enlarged prostate—the contraction of the rectum stimulated the bladder to contraction, which was then sufficient to overcome the resistance of the sphincter vesicœ, and the pressure of the passive engorgement around the urethra.

The last ten years' experience has convinced me of the correctness of these conclusions, and saved me much trouble in cases of protracted illness among children in which retention of urine would otherwise have proved one of the most distressing and troublesome accompaniments.

In one well marked case occurring in the Spring of 1854, my little patient was relieved regularly for more than a week by the mother introducing from time to time, the tube of a common syringe. In this case the repeated use of ice and ice water would have proved fatal, and the re-introduction of the catheter from time to time for so long a period would almost necessarily have resulted in serious injury to the urethra and prostate gland, to say nothing of the trouble and difficulty of performing the operation.

I have always found it necessary to have the lower bowels thoroughly evacuated by enema, and in some cases—where the tone of the bladder is too far spent—the cold douche to arouse it, before it would contract properly.

In cases where the prostatic engorgement is active in its character, this treatment will fail; but in these cases there is no risk in resorting to the ice and ice water injections, as recommended by Dr. Morton and M. Cazenave.

The use of the tube is most effectual in those cases where the vital forces are most depressed—where the peristaltic action of the bowels is very much weakened—where tympanitis exists to the greatest extent, and where the contractions of the rectum are overcome by the sphincter muscles, and there is regurgitation of gas into the colon.

I will mention *en passant*, that I have been persuaded that in cases where tympanitis exists in an inordinate degree, great relief may often be extended to a patient, and much damage to the viscera prevented, by thus providing for the escape of gas, or even by the introduction of a gum elastic catheter into the sigmoid flexure of the colon. It would relieve the inordinate and injurious distention of the bowels, take off the pressure from the diaphragm, and make respiration free and easy. This cannot always be accomplished by the use of absorbents, &c.

That the removal of the gases, as directed will relieve retention of urine in many cases, I am fully convinced from numerous trials during the last ten years. This remedy I have found invaluable, too, from its simplicity. A tube for the purpose—the nozzle of a syringe, a piece of reed, or a large sized quill, in the hands of the mother or nurse—with instructions as to its use, will often save the physician many visits and re-introductions of the catheter, aside from the incalculable benefit, it may prove, or the suffering it may save, to his little patient.

I did not intend to write an article on *Ischuria*, nor do I now, but simply to comply with your request, and give you the treatment which had in numerous instances proved so satisfactory in my own hands. Should it be the means of affording more speedy relief to any little sufferer, it will have amply requited me for the few moments I have spent in penning these lines. For what it is worth, I give it to you. You have my permission to put it into shape and use it as you like.

# SELECTIONS.

## *Notes on the Practice in the Hospitals of Paris. The Ecraseur," "Electric cautery," Maisonneuve's method of dividing strictures, etc., etc.* By George Suckley. M. D., late Assistant-Surgeon, United States Army.

In watching the practice at the various Parisian Hospitals, we find many methods in vogue at one or the other, which are either entirely new or else but partially known to members of the Medical Profession in the United States. Some of these plans of treatment appeared confined, for the most part, to their originators, or to persons who, having adopted them, ride their "hobbies" on all occasions. They would, for example, *if possible,* amputate with a "drainage tube," tie an artery with an "écraseur," or trephine with the actual cautery, after all of which applications, most plausible reasons would be assigned by the enthusiastic operator showing, to his own satisfaction at least, the eminent superiority of his plan of treatment over all others.

Some of the prevailing "hobbies," however, have their advantages in special cases, and are, therefore, entitled to our careful attention, and, although descriptions of several have been more or less perfectly given in the different American Medical Journals, it may not be amiss to describe the manner in which they are at present applied in Paris, even at the risk of repetition.

*The "Ecraseur."*—The use of the "écraseur" is confined to two hospitals, La Pitié and the Lariboisière. In the latter Chassaignac every Monday morning expatiates upon the merits of *"l' ècrasement linéaire,"* accompanying his oratory, as far as possible, with practical manifestations of its powers. In his hands the instrument certainly works admirably in many cases, especially in operations about the anus, tongue, cervix uteri, or vagina, or in almost any other situation when there is danger of excessive hemorrhage, as well as in cases where the loss of even a small quantity of blood cannot well be borne.

The surgeon above named gives the following summary of the benefits accruing from the use of this instrument, as compared with the knife:

1st. *The almost total absence of hemorrhage.*

2nd. *The rarity with which the employment of this instrument is followed by profuse suppuration, erysipelas, or* PHLEBITIS AND ITS CONSEQUENCES.

It is almost needless to say that union by first intention is almost entirely done away with when this instrument is used. As offsets to this, are the facts that union by first intention is rarely got in the Paris hospitals after the knife, and even if obtained, it is of course of but little account when compared to the excessive frequency of "purulent absorption."

Among at least a dozen operations that I have seen performed with this instrument, there was one which pleased me very much. This was the removal of a hemorrhoidal tumor of about the size of a pigeon's egg, situated just within the verge of the anus. The tumor having been pulled down with a peculiar "clawed" instrument, the chain of the "écraseur" was passed around its base, and drawn moderately tight by hand. The instrument was then "worked" in the usual manner by raising and depressing its pump-like handle, each elevation or depression being accompanied by a sharp "click," at the same time drawing in about a twelfth of an inch of the chain. The instrument was worked very slowly, eight minutes elapsing between the commencement of the operation and the complete separation of the tumor. The amount of hemorrhage during, and at the end of the operation, would sarcely fill three teaspoons. It took twenty-four elevations and depressions of the lever of the instrument to execute the operation. The patient, being under the full influence of chloroform, was operated upon while reclining on his side.*

Outside of the Lariboisière the "écraseur" does not appear to be a favorite in the Paris hospitals, with the single exception of La Pitié, where Maisonneuve uses it not unfrequently, and carries its application with his usual ardor, or recklessness, to an extreme. He has attempted to amputate with it several times, but the details or results of these operations are far from being perfectly satisfactry; although the number of such amputations is yet to small too allow the formation of a practical conclusion of the general merits of the process. In the last case it was used for the amputation of an arm at about its middle, but the screw of the *bones breaker* (I know not what else to call it) caused the bone to snap at a point some distance above the insertion of the deltoid, and, in endeavoring to twist the loosened extremity clear from the insertion of the muscle, the wound was forced open, and the brachial artery commencing to bleed freely, had to be tied. The unfortunate patient died after several weeks, but it was thought that his death was more properly owing to an independent disease of the lungs, and not a direct sequence of the operation.

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* The "ecraseur" although now well known to many in the United States, is, perhaps, a sort of unintelligible article to some. For the benefit of such, the following rough explanation may be kindly received: Suppose you wish to divide a sphincter ani by this method when operating for fistula in ano—Take an ordinary chain-saw with very blunt teeth, pass one end up the fistula, and bring it out through the anus. This being done, draw the two ends through a strong metallic double canula or tube. Then by means of a small windlass at the further end of the tube, tighten the chain until it has, in the course of ten minutes, cut through the sphincter, and is entirely free. Thus you have planned, put together, and operated with an extemporaneous "ecraseur which contains in principle all the elements of one of "Charriere's best," but which lacks, of course, finish, strength, and the improved power that an instrument made by a professional instrument-maker possesses.

(Since writing the foregoing, another amputation with the "écraseur" has taken place in time for me to insert its details before mailing this paper):

*Amputation of the forearm with the "écraseur."*—A girl of 17, employed in a manufactory of percussion caps, was, on the 1st of February, severely injured by the explosion of a large number of these articles. Among other injuries more or less severe, the right hand was so shattered, that on the day following the accident Maisonneuve decided upon amputating the lower end of the forearm. The girl having been rendered unconscious by chloroform, the operation commenced. The first desideratum was to break the bones at a point about two inches above the wrist, which was accomplished by means of a screw working in a complicated set of machinery that I cannot attempt to describe in words.—The next thing was to apply the "écraseur" sufficiently below the point where the bones were broken, to give sufficient covering to the stump.—After this latter instrument had its chain considerably tightened upon the portion that it surrounded, an incison was made around the forearm at a point just above the wrist, and the lower fragments twisted and pulled through it. The chain of the "écraseur" was then tightened, and the operation completed. No tourniquet was used, no vessels tied, and not a teaspoonful of blood lost.

As the patient was in a better state of anæsthesia than is common to find in Paris, she only shrieked moderately during the middle of the operation. The time consumed during the amputations was about 15 minutes; that from the commencement of the working of the 'écraseur" *six minutes*. The advantages expected to result from the operation are as follows; 1st. Less hemorrhage, as we have seen. 2nd. Less danger of *phlebitis*—a very important consideration to surgeons of crowded hospitals.

The ultimate result of the case will, of course, be the best proof for or against the sagacity of the measure.

The operation, as a *spectacle,* seems very barbarous. If the patient is well under the influence of the anæsthetic, the semblance of brutality is greater than the reality; and if the operation is more successful than the others the end ought to justify the means. It is well known that phlebitis, and the so-called "purulent absorption," are the great evils with which the Parisian surgeons have to contend. Of late years nearly all the larger amputations have proved fatal from these causes. Maisonneuve, in reflecting upon the wretched condition of affairs, came to the conclusion that no means could be more disastrous in result than the ordinary employment of the knife in these operations. He therefore considered it his duty to cast about for some other means of obtaining a successful process.

After the "écraseur" had been employed for some time in removal of tumors, for dividing fistulæ, etc., etc., and it had become evident that the amount of cases of purulent absorption was much reduced in proportion, he imagined that could he apply the same method to the removal of the limbs, that he would be justified in expecting more satisfactory result. How to sever the bones became the next consideration. Viewing the comparative infrequency of purulent absorption as a sequence to a compound fracture, he concluded to avail himself of the idea thus thrown out, and by following his object pertinaciously, he has after many experiments, and the trial of eight or nine different kinds of apparatus, at length brought this method of operation to a moderately satisfactory position.

It seems to me, however, that the common employment of this method of amputation will scarcely answer in our democratic country, and even in France, had it not been for the discovery of anæsthetics, the process would never have come within the scope of the wildest flight of a surgical imagination.

There are two principal models of the "écraseur" in use. That of Chassaignac is worked by means of the pump-like handle already spoken of, each elevation and depression of which draws in a certain fixed amount of the chain.

The other is the improved machine of Maisonneuve, by which the power is applied by a screw. This latter instrument has the following advantages:

1st, it has more power; 2d, it can be worked more slowly and not by jerks; 3d, it is not fatiguing to the operator; 4th, it is more simple in its construction, and therefore more readily cleaned or repaired; 5th, it is cheaper.

Maisonneuve's "écraseur" for *amputating* is of extra size, and much greater strength. The ordinary chain is replaced in this instrument by a sort of rope made of tough, strong iron or steel wire.

The following are the prices of these instruments at Charriére's

| | | | | | |
|---|---|---|---|---|---|
| Chassaignac's "écraseur" | | | | 45 | francs. |
| Maisonneuve's | " | ordinary size | | 30 | " |
| " | " | " | with attachment admitting the use of chains two sizes, two chains being furnished. | 45 | " |
| " | " | for amputations—large size | | 80 | " |
| " | " | " | with the "bone-breaker." as at present used. | 150 | " |
| Extra chains for the common-sized instruments, each | | | | 5 | " |

*Chassaignac's "drainage tubes."*—Chassaignac is very fond of introducing small tubes of india-rubber, perforated on their sides, by which he gradually draws off the pus of an abscess. He applies them more particularly to the treatment of the chronic or sub-acute abscesses so commonly met with among the poor of large cities. The modus operandi of applying the "drainage tubes" is to transfix the abscess with a long trocar inclosed in its canula. This being done, the trocar is withdrawn, and the flexible tube passed through the canula in its place. The canular is then removed, leaving the abscess now only transfixed by the drainage tube, the ends of which are then tied together, and the tube thus left until it is thought advisable to remove it permanently, or for the purpose of substituting another. The drainage tubes vary in calibre from ⅛ to nearly ¼ of an inch, their internal diameter varying from that of a knitting needle to that of a No. 3 Hutchinson's bougie. A common elastic catheter of small size, with holes cut along its sides, will answer very well as an extemporaneous drainage tube. In effect, these drainage tubes are simply *hollow india-rubber setons.* They draw off the pus very well *at first*, but after a short time the most of this fluid passes *along the side of the* tube, as is the case with the ordinary *seton*.

An interne in Chassaignac's service says, that frequently after removing a tube and slitting it open, the interior is found *dry!* But this is not apparent to the vision of the man whose hobby it is.

I have not seen "drainage tubes employed in any other hospital than the Lariboisiére. Chassaignac says that their use in the treatment of hydrocele is equal, if not superior, in practical advantages, to the ordinary method of iodine injection.

*The surgical uses of the perchloride of iron.*—In the treatment of *varices* this article is now extensively used, and it has also been employed for the rapid coagulation of the contents of aneurismal sacs. The strength of the solution used, is that recognized in French Pharmacy as of the "thirtieth degree." (This is by weight, 16 parts of the salt to 84 of water.) *Weaker than this, the coagulating effect is lost*, and if used much stronger, it acts as a *dangerous caustic* The solution should be made just before using, because if kept four or five days, it decomposes.

I witnessed an operation for the *radical cure of varices* by this method, at La Pitié. The veins on the lower limbs were markedly dilated and tortuous, certain of the dilatations along the course of the long saphena being as large as an ordinary thimble. In these larger dilatations, the quantity injected was five drops, thrown in as usual by the pecular syringe used, by which every turn of a screw injects exactly half a drop, thus easily regulating the amount employed. In places where the varices were smaller, a less amount was used. Coagulation was almost instantaneous, and the ultimate result of the case very satisfactory.

In operating for varices by this method, it is necessary to compress the veins by a bandage on the cardiac side of the point of operation, as in ordinary cases of venesection. This has a doubly beneficial effect; first, by guarding against the risk of throwing such a dangerous solution into the general circulation; secondly, by causing the veins *to dilate well*, the clots are *larger*, and thus more thoroughly obstruct the circulation through the vein.

I saw the property that the perchloride of iron has of causing instantaneous coagulation put to a novel but very useful purpose by Maisonneuve. This surgeon, during the course of the removal of a cancerous tumor in the submaxillary region, finding that a continuous oozing from the capillaries and smaller blood vessels, was not only obstructing his view, but also weakening, the patient, who was not in a condition to stand the hemorrhage, called for a solution of the article under consideration with which he sponged the wound, with the effect of instantly controlling the hemorrhage.

*The treatment of strictures by dividing from within—Maisonneuve's present method*—This winter, during my observation of the practice in Maisonneuve's "service," at La Pitié, there have been two cases of very "tight" strictures of the membranous urethra, treated by *internal section.* The *idea,* of course, is by no means *new,* but the peculiarities of the method of operation, employed by Maisonneuve, are well worth attention.

In both the cases which came under my immediate cognizance, the strictures were excessively constricted. The following are the brief details of the plan pursued: the patient lying in the usual position, an elastic capillary bougie was introduced, after some difficulty, through the stricture. This bougie was slightly tapering, having upon its greater end a metallic "ferrule." As soon as the stricture had been fairly passed, a small-sized silver instrument, looking like a nearly straight catheter, was screwed on to the metallic ferrule of the bougie, and then gradually introduced into the urethra, pushing the bougie before it, so that the latter curled itself up in the bladder, after having acted as a pioneer or guide for the silver instrument. The silver instrument having passed through, or *well into,* the stricture, is held steadily until a stylet 'sliding in a groove is passed down the catheter to the stricture, which it *partially* divides. The cutting instrument has an almondshaped edge, cuts from the *lower side* of the grooved canula and *not* from its *end* as *that* is obstructed by the insertion of the ferrule of the bougie. The stricture being now partially divided, the whole apparatus is then withdrawn, and another flexible bougie, which is generaly *conical,* having the calibre of its main body considerably larger than the bougie first used, is then passed in the same manner as the preceding, and with about the same ease, owing to the already partially divided condition of the stricture. The *large* urethrotome is then screwed up the bougie, as this other was in the first instance, and pushing in the same manner the bougie before it, enters the stricture. The urethrotome being passed sufficiently *through* the constriction, the concealed blade is opened, and the stricture divided completely.—The urethrotome and bougie are then removed, and a large-sized steel sound readily introduced. The whole method strikes the eye as being preferable to Syme's operation of section from *without,* as it does away greatly with the danger of being followed by those distressing sequences, *urinary fistulæ.*

Unfortunately, one of the two cases that I have seen, where this operation was employed, was fatal; the other recovered. First and last, Maisonneuve has thus operated upon a considerable number of cases, but with results far less satisfactory than would be at first supposed. A highly intelligent interne attached to Maisonneuve's "service," informs me that the proportion of deaths is one out of every *four,* thus treated; and that, with the exception of arthritis and delirium, there are no well-marked symptoms before death. The soft parts in the vicinity are neither gangrenous nor unduly inflamed. The same medical gentleman gave it as his opinion, from the autopsies that he has made, that the cause of death is probably the direct absorption of urine into the tissues, acting as a poison. But it is difficult to realize that the small amount of urine thus absorbed would produce such a general poisoning effect, especially when the amout extravasated is not sufficint even to in duce gangrene.—The whole modus operandi of the poisonous agency is wrapped in obscurity, although I suspect that the unfavorable terminations are more or less assisted by the pernicious atmosphere of the hospital wards.

The instrument used by Maisonneuve are manufactured and sold by Charrière at the following prices;

| | | |
|---|---|---|
| Small Urethrotome, *with stylet* complete.......... | 10 | francs. |
| Large “ (opening like scissors)....... | 30 | “ |
| Bougies (to fit the above) according to size, from | 1¼ to ½ | “ |

In connections with the foregoing subject is the method employed by the same surgeon to measure the distances between strictures where there are several. This is by introducing bougies of a small calibre completely through the strictures, each bougie terminating in a heart or olive-pointed head. Owing to the shape of this head it is readily *introduced*, but upon its withdrawal, at every stricture it "cathes," thus giving an indication to the manipulator, who ties a string upon the free portion of the instrument whenever an obstruction is felt, the distances between the strings denoting the separation of the strictures. Of course, due regard must be had to the comparative extension of the penis at the time, and some fixed point for comparison be settled upon before hand.

*The "electric cautery."*—Among the novelties of the day, is the improved "electric cautery," by means of the "pile of Middledrof" containing six "elements of Bunsen." This beautiful and neat means of applying the actual cautery has been introduced in Paris within the past two months. The principles involved are not new, the construction of the present apparatus unites the advantages of simplicity, portability and ease of administration, combined with the perfect control that the operator has over the agent. The whole is contained in a box, say 22 inches ⋈ 10 ⋈ 12. It is furnished by Charriére, complete with all the instrument for cauterization, section of tumors, etc., for 350 francs (say $70.) Charriére informs me that he expects to be able shortly to furnish the apparatus much cheaper, and also inclosed in smaller boxes.

The advantages of the "electric cautery" are double. In the first place, in general practice, the bad effect upon the minds of the patient and friends, to a great extent controls the application of the actual cautery as heretofore used, and in a manner hampers the will and desires of the medical practitioner. By using the *electric* apparatus the desired result can be obtained without shocking the non-professionel observer by the horrible sight of "red-hot pokers," and such things; and the patient may frequently consent to be "burned by electricity," when the mere mention of the "fer rouge" would almost secure the dismissal of the enterprising practitioner recommneding it.

The second good effect, in fact a *real* advantage, is that by using the present contrivance, the amount of heat can be exactly regulated, and a 'red" or a "white" heat generated and kept up at *will.*

Nélaton has recently used the "electric cautery" several times, at his cliniques, and expresses, himself very much pleased with it.

The ordinary actual cautery is much employed by Maisonneuve, and as equally eschewed by Nonat, in the treatment of ulcers of the os uteri and cervix. I saw the former apply the cautery in case of schirrous disease of the same parts, but for what useful purpose, I am unable to imagine. Jobert, at the Hôtel Dieu' has a mania for treating not only ulcers of the os uteri, but also many other complaints with this agent.

In those cases where the hot iron is applied directly to an ulcerated os uteri, the patients generally suffer but little pain from the burning of the *womb itself,* but they sometimes complain bitterly of the suffering induced by the *sides of the speculum* getting hot, and burning or smarting the *vagina.*

*The injection of iodine into the knee-joint, as a cure for chronic synovitis.* This plan of treatment is not unfrequently adopted; but the most that can be said in its favor is, that some of the patients operated upon have recovered. The only case in which I have seen the method used, was that of a young woman who had suffered from chronic synovitis of the right knee for a long time. On the 25th of January, after drawing off the superabundant synovial fluid, Chassaignac threw an iodine injection into the cavity of the joint thus emptied. The operator in his remarks at the time, said that as the only danger to be feared was from excessive inflammation, the after treatment would be confined to such means as would more effectually keep down and prevent undue inflammatory action. In addition to ordinary antiphlogistic measures, he relied greatly upon keeping the parts in a state of absolute quiet. Accordingly he confined the limb to a sort of extemporaneous inclined plane.

I heard from the patient at the expiration of a week, at which time she was in a very fair condition—everything apparently going on as favorably as could be wished. She stated that after the first two days she suffered but little pain. I will watch the result, and report it hereafter, should I continue my Paris correspondence with the Journal.

The French surgeons advocating this treatment say that in thus treating chronic synovitis of the knee-joint, except where untoward symptoms supervene, the result is simply an alteration of the secreting condition of the synovial membrane, *without the production of adhesions.* They also say that the parallel treatment of hydrocele by iodine injection, is in the majority of cases, *not* usually followed by adhesive inflammation, as is generally supposed, but simply by an altered condition of the secretive functions of the membrane.

Having thus given a rapid sketch of the principal novelties and "hobbies" at present in vogue in Paris surgical practice, I now leave the consideration of parallel matters in the practice of medicine proper, for a subsequent article. But before finishing the present paper, I feel constrained to make a few general observations on matters not properly embraced under its healing.

In the first place, a medical man, in viewing the systems and practice of foreign countries, necessarily compares what he there sees with what he has been in the habit of seeing at home: this has been my own case, and I hope that it will not be considered presumption if I recount a few of the things that most astonish me.

Foremost among these are the wretchedly ventilated wards of the principal Parisian hospitals, with the marked and only exceptions of the Lariboisière and Beaujon. The close; almost suffocating, wards of the Hôtel Dieu, Charité, La Pitie, and "Faculté" are a standing reproach to this nation, believing itself and boasting that it is at the head in medicine as well as in the other sciences. Even the Lariboisière itself is not, in my opinion, nearly as well ventilated or arranged as the New York Hospital, or several other kindred institutions in America· With the two exceptions mentioned, the hospitals of Paris are deficient in respect to ventilation, to an appalling extent. This readily accounts for the vast amount of erysipelas, phlebitis, etc.—the incubi upon Parisian surgery—which continually exist.

But there are other points which attract attention and which are at variance with most of our preconceived ideas. Wounds are enveloped in thick coverings of picked lint, compressed, etc., and appear to be thus kept *too warm;* at the same time but little care is taken to keep them *clean* Cold water dressings are very rarely employed, and in some of the hospitals seem to be entirely eschewed. Evaporating lotions I have seen used but once! Several times I have noticed an eminent surgeon, while dressing an ulcerated surface, apply the sponge directly upon the *granulations!* yet he takes but little pains to wash or keep the skin *adjacent* to the discharging sores clean. This being generally covered with the dried, stinking decomposing secretions of the ulcers, is foul and disgusting.

The practice of keeping stinking wounds muffled in thick dressings, and under warm bed-clothes, does not strike me as consistent with good surgery and when combined with the bad ventilation of the wards themselves, already alluded to, must exert a very unfavorable influence upon the patients, and, to a certain extent, accounts for the frightful mortality which it is well known exists in the French hospital.

In hospital practice, simple cerate is the most freqent ointment employed. It is much the same as that used by us, except that the wax entering its composition, is the *unbleached,* yellow kind, I suppose, because it is cheaper—as the druggist shops generally supply the *white* cerate. It is also more fluid than with us which allows its use for lubricating bougies, and other instruments, and the hands for vaginal examinations. It is commonly emplyed for these purposes, and has the advantage over plain olive oil of not *dripping,* thus saving the bed clothes, carpets, etc.

The treatment of fractured bones at present in Paris is worthy of the days of the enlightened "Frère Jacques," and a disgrace to the present French surgeons. I have scarcely seen a single case of fracture, especially of one of the long bones, that has not united with positive deformity, much of which might have been prevented by the proper application of *common sense.* There is scarcely a second-rate surgeon in the United States that would not blush to turn such "cures" from his hands, and at the delightful prospect of a civil suit for maltreatment. To enlarge upon this subject will occupy more room than can be spared; suffice it to say, that I am, in the above statment, echoing the views of every American student with whom I have conversed upon the subject.*

*The use of anæsthetics.*—Ether is not used at all, chloroform being solely relied upon. This latter article is almost invariably administered, even by Nélaton, who is considered by many to be the ablest and most complete surgeon in Paris. Fear of the evil consequences of chloroform causes the surgeons to be so cautious and timid in its administration, that the majority of the patients operated upon are but partially placed in a state of anæsthesia, and almost invariably during the course of an operation, the violent shrieks or struggles of the victim show that the consciousness of pain is scarcely diminished, while the intoxicating effect of the vapor destroys for the time his reasoning faculties, and frequently renders him very unmanageable. No indication is fulfilled by thus using the article, and it seems to me that rather than *half* use it, it had better be dispensed with entirely.

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* A friend walking through a ward of one of the large hospitals, saw a case of rather recent fracture of the thigh. The only treatment pursued was to order the man to lie flat on his back. A turn or so of a bandage was made around the foot, and then the ends pinned to the corner of the bed. This was the only substitute for entension, conter-extension and the other means for fulfilling the idea still in vogue in America, but apparently obsolete in France, of keeping fractured bones in apposition.

Chassaignac, who alone among the Parisian surgeons appears to have studied the modus operandi of chloroform, regulated its application with a great deal of nicety and discrimination—guiding himself by carefully watching the pulse and respiration. His patients rarely make a disturbance during the operation, and for the most part seem thoroughly unconscious of pain. After an operation in which the anæsthetic has been used, the last mentioned surgeon is very particular to have the patient carried back to the ward, with the *feet elevated* and the *head down.*—He fancies that the circulation in the brain is thus better kept up. The old man, despite his "hobbies," seems to be a very sensible, clear-minded surgeon, and an enthusiast in his profession. His lectures, interesting and practical, are delivered in such clear and measured accents, that his clinique is quite a favorite with English and American students.

Among the operations of more or less interest lately performed in Paris, besides those already mentioned, are the following:

*By Maisonneuve at La Pitié.*—Operation for fistula *in ano* with the view to complete cure. In this case the sides of the fistulous track were "scooped out" with the knife, the sphincter having been first divided.

Operation in December of "resection" [exsection] of the head of the femur. This was the case of a young woman suffering from morbus coxarius. The patient — two months having elapsed—is doing well, although much reduced by suppuration and long confinement. January 22d. Operation to produce an artificial anus at the bottom of the descending colon. This was the case of a patient suffering from complete malignant stricture of the rectum. The operation will certainly prolong the days of the wretched creature a little longer, and has given him great temporary relief, as the symptoms produced by the accumulated fæces were distressing and threatening.

The same surgeon has lately operated on a woman for femoral hernia. The strangulation was of eight days' standing, and, as a consequence, gangrene had completely taken place. The operation consisted simply in laying open the mass by a free incision. Maisonneuve's plan of treating strangulated irreducible herniæ is rather peculiar. If the strangulation has existed under forty hours he operates in the usual manner, and reduces the gut; but if it has lasted over that time, he does nothing until the seventh or eighth day, at which time he simply makes the incision as in the case given. An artificial anus, the result, he considers far preferable to the risk of general peritonitis should the gut be returned too early. He also waits, as we have seen, for a sufficient time to allow the firm adhesion of the gut at the point of departure, which otherwise would perhaps be drawn in by peristaltic action.

Maisonneuve is very partial to a method of removing malignant tumors in the submaxillary and carotid regions, by caustic. His method is to use "*flèches*" of the paste of canquoin (composed of chloride of zinc and wheat flour paste). These "*flèches*" are simply pegs the composition of which kiln-dried becomes quite hard; tapering to a sharp point at one end, their bases are from two to three lines square, and their length varying from one to one and a half inches. In action they are analogous to the common "trochisques" of corros. sublimate. When the "*pâte de canquoin*" is required simply for an external application, it is made of equal parts of the dough and the chloride, but in making the "*flèches*" two parts of flour paste are necessary to one of the salt; this is in order to secure the proper hardness and firmness when dry. After being dried they should be kept in a closely stoppered bottle.

To remove a tumor with the "*flèches*" they should be introduced into small lancet holes (through the integument), situated about half an inch apart around the circumference of the tumor. They should then be pushed obliquely backwards and inwards their entire length, their points converging towards a common centre. The caustic thus applied acts very effectually, but operating for a period of days subjects the patient to long continued suffering. If the whole of the tumor is not removed at first, fresh fleches are introduced in the same manner. Should the tumor be large, the cavity after its removal is appalling. Several of the cases that I have seen undergoing this treatment have been attacked by erysipelas, and one was fatal. The cause of death in this case was a hemorrhage of one of the branches of the external carotid occurring in a patient already much enfeebled by suppuration and long suffering.

The advantages which Maisonneuve thinks justify the removal of cancers by this method, are that they can be thus destroyed in places where the intricate relations with large blood vessels and nerves render attempts to "dig" them out with a knife hazardous, and unsatifactory.—As opposed to the foregoing, we find that the constitutional and *real* suffering during the action of the caustic is very great—severe hemorrhages *sometimes* take place, and erysipelas, facial paralysis, and other complications frequently occur. Should not these facts deter the conscientious surgeon from resorting to such means, especially when the chances of ultimate benefit to the patient are so remote, even though the tumor be successfully removed the first time?

At the Hôtel Dieu there have been but few operations during the winter. It has suffered much from erysipelas, typhoid fever and kindred disorders. The only operations of especial interest have been one or two attempts at curing vesico-vaginal fistula. These cases are a hobby with Jobert, who relies entirely upon the use of the interrupted suture. His other hobby is to use the actual cautery upon nearly everything. He has upon his "public days" two furnaces filled with red hot irons, which he uses with an unflinching hand for the benefit of suffering humanity, and the edification of the students following him.

At the Charité there has also been a great dearth of interesting surgical cases during the winter. Velpeau gives his ordinary tri-weekly clinical lectures as usual, to a very limited number of students.

Nélaton at the Hospital of the Facultly, is the great attraction to surgical students. With a happy faculty of explaining himself clearly, combined with a thorough understanding of his subject, he unites the common sense of a good practitioner and the cultivated manners of a gentleman.

His lecture-room is crowded daily, many students being obliged to stand throughout the lecture. During the past winter he has performed several interesting operations, removing tumors, etc. I saw him take out a diseased testicle very nearly. After the incision through the scrotum and tunica vaginalis with a scalpel, he finishes the operation with *scissors.* This is his ordinary plan, cutting the cord little by little, and tying each bleeding vessel as it is divrded. Among many practical remarks which continually enrich his lectures was one that struck me as well worth recording. He said that it is his rule never to attempt to put a *lateral* ligature upon the internal jugular, for the reason that nearly, if not quite, always the included portion at the end of four *or* five days *sloughs out leaving a larger hole than the first wound,* from which the sudden bursting out of a violent hemorrhage speedily proves fatal.

In the present article I have endeavored, in an impartial manner, to present the facts as they stand, for the most part leaving its readers to draw their own conclusion concerning the efficacy and value of the different methods spoken of that are now in vogue in Paris, compared with those that they are familiar with at home.—*N. Y. Jour, of Med.*

## *Proceedings of the Montgomery Co. Society, April,* 1858. Reported by C. M'Dermont, M. D., Dayton, Ohio.

*Dr. Carey* read a paper on the "Toxical action of Veratrum Viride upon Dogs."

Dr. Carey said, that the time allotted for the consideration of *veratrum viride* had been too brief for him to prepare anything like an elaborate report on the subject. He had made some experiments with the article upon dogs, which were designed to illustrate the toxical effects of the agent, and would submit them for the consideration of the Society this evening.

The *first case* to which he administered the Veratrum—Tilden's Fluid Extract—was a young spaniel, laboring under influenza. His respiration was hurried, with pulse 158 per minute. The dose was six drops. The dog vomited in thirty minutes, which act was repeated in an hour. In 2½ hours his pulse was 100 per minute.

*Case* 2.—A small cur dog took 20 drops; pulse 106; respiration 1 to 4 pulsations. In eight minutes evidenced nausea, in ten vomited, which was repeated at short intervals for half an hour; in fifteen minutes, pulse 70; in thirty, pulse 40; in fifty, pulse 32; in 1¼ hours, pulse 40; in 1½, pulse 68; in 1¾, 72; in 2½, 60. In thirty minutes after taking veratrum, animal purged and staggered in walking, in sixty minutes could not stand. This prostration continued for three hours. In fifteen hours animal felt well and partook of food with avidity.

*Case* 3.—On the subsequent day, gave same animal fifteen drops veratrum and half a grain of morphia—pulse 84; in half an hour, pulse 96, no nausea; gave fifteen drops more veratrum, and in an hour, pulse 86; gave thirty drops additional, without influencing in the least perceptible degree, either the heart or stomach.

*No.* 4.—Next day, gave same dog thirty drops veratrum and sixty drops laudanum, with pulse 100. In thirty minutes, pulse 80; in sixty, pulse 72, irregular; in two hours, 60; in four hours, 72. No nausea, respiration irregular and sighing.

*No.* 5.—Next day gave to above animal, with pulse 136, one hundred drops veratrum. In ten minutes, pulse 72; in fifteen minutes exceedingly irregular and intermitting; in twenty fluttering, with an intermission of about one-half of the time; in twenty-one minutes, heart ceased to pulsate, and in twenty-three minutes ceased to respire. Dog vomited in eight minutes, urinated several times, did not purge, respiration hurried, and sighing after ten minutes, finally became irregular and slow until it ceased entirely. There was no stertor, nor spasmodic motion of the voluntary muscular system.

*No.* 6.—Gave a medium sized dog twelve drops of veratrum, with pulse 120. In sixteen minutes, pulse 100; in thirty minutes, pulse 76, in which condition they remained for three hours, and rallied. Vomited in ten minutes, and continued at short intervals for half an hour; in thirty minutes purged. There was no prostration of the voluntary muscular system in this case, nor depression of spirits.

*No.* 7.—Subsequent day, gave to this dog seventy drops veratrum, with one-third grain of morphine, pulse 90. In two minutes respiration hurried and panting, urinated frequently, nausea, and in six minutes vomited; in fifteen minutes pulse 40, purged; in thirty minutes, pulse 12, regular; can't stand. Nausea still distressing, respiration slow and calm. Gave morphia half a grain and wine half an ounce. No more vomiting; in forty minutes pulse 20, in sixty minutes pulse 48; respiration 12, in which condition animal remained for four days. Next morning felt well, pulse 112, and partook of food with relish.

*No.* 8.—Threw into the rectum of same dog, on next day, 100 drops of veratrum and half grain of morphine. In two minutes evacuated contents of rectum; in seven minutes commenced panting; in thirteen minutes, great nausea, pulse 30; in fourteen minutes, vomited; fifteen minutes, pulse 32, irregular; twenty-five minutes, pulse 160, respirations 80; can't stand; can't count pulse. Took morphine half grain, and wine half an ounce; sixty minutes pulse fluttering, still can't be counted; passed a current of electro-magnetism through the chest behind the fore legs; in seventy minutes, pulse more regular; seventy-five minutes, slower and still more uniform; respiratious slow and deep, animal somnolent. In one humdred and twenty minutes, pulse 160, from which condition the dog gradually recovered. This experiment was repeated with similiar results.

## SUMMARY.

| Case. | Dose, | No. pulse. | Time of vomiting. | Minimum pulsation. | Time of minimum pulsation. | Reduction. | Anodyne. |
|---|---|---|---|---|---|---|---|
| 1 | 6 | 158 | 20 min's | 100 | 2½ hours | 58 | |
| 2 | 20 | 106 | 10 " | 32 | 50 minutes | 78 | |
| 3 | 60 | 84 | — | 80 | 1¼ hours | 4 | ¼ gr. mor. |
| 4 | 30 | 100 | — | 60 | 2 " | 40 | 60 d's lau. |
| 5 | 100 | 136 | 8 min's | 72 | 10 minutes | 64 | |
| 6 | 12 | 120 | 10 " | 76 | 30 " | 46 | |
| 7 | 70 | 90 | 6 " | 12 | 30 " | 78 | ¼ gr. mor. |
| 8 | 100 rec'm | 100 | 14 " | 22 | 15 " | 78 | ¼ " " |

From the foregoing it will appear, that *veratum viride* when administered in large doses to dogs, is a powerful narcotic poison, capable of destroying life. It produces its toxical effects, first upon the ganglionic, and finally implicates to a limited extent, the cerebro-spinal system of nerves. When given alone, it greatly reduced the force and frequency of the heart's action. When combined with morphine or laudanum, this action is modified. The greatest reduction of the heart in the experiments was 78 beats. This obtained in three instances, viz: No. 2, where 20 drops were given alone, and Nos. 7 and 8, where 70 and 100 drops were combined with ¼ grain of morphine, and respectively taken per mouth and anus.

The shortest time occupied in reducing the heart to its minimum action was ten minuter. This took place at the rate of 6 $\frac{7}{16}$ beats per minute.

When portion under 20 drops were administered, the pulsations of the heart were quite regular and the diminution of action uniform, until the minimum was attained; but during the rallying stage, the action was in all cases irregular and intermitting.

The longest time occupied in inducing vomiting was fourteen minutes, and that was when the article was thrown into the rectum. In two cases, it occourred in ten minutes, in one six, and another eight. In all it was protracted and the nausea distressing. In the case that proved fatal, death commenced at the heart; this organ ceasing to pulsate two minutes before the lungs ceased their function.

The influence which opiates exerted in these cases is of great interest. In No. 3, 60 drops of veratrum, with ¼ grain of morphinae, did not affect the circulation and stomach. In No. 4, 30 drops of veratrum and double the quantity of laudaunm reduced the heart forty beats in two hours, but did not produce nausea. In No. 7, 70 drops of veratrum, with ¼ grain of morphine, produced no greater effects upon the animal than 20 drops did in case 2. So, too, of No. 8, where 100 drop were thrown into the rectum with ¼ grain of morphine. As to the facts in these cases, there can be no question; but they require additional confirmation to establish the antidotal powers of opiates over veratrum viride.

*Dr Denise* complimented Dr. Carey on the result of his experiments. These were highly valuable in a scientific point of view. He hoped his friend would continue his investigations, as the subject of veratrum viride was at present one of deep and general interest among medical men. He looked upon veratrum as the greatest remedy of the age. He was in the hapit of using it in a great variety of cases, and with the happiest results. Had used it successfully in pneumonia, bronchitis and convulsions. In cases of pneumonia, had used the veratrum alone with marked benefit. Has found it act like a charm in allaying the catarrhal fever of children. He mentioned a case of a child that was subject to attacks of this kind; they were always promptly relieved by the veratrum, which the mother was in the habit of administering at every onset of the disease. He had never kuown it to fail in reducing the heart's action.—It occassionaly produced nausea, but no other unpleasant effect. He did not know how the old doctors got along without it.

*Dr. Brenton,* had not used the veratrum extensively, but from his experience, he was induced to regard it with much favor. He thought it suitable in a great variety of diseased conditions, and especially in diseases of the heart; had given it for three months to a lady who was suffering with hypertrophy of the heart. Prior to its use, her pulse averaged 130 per minute, and she had a bad cough. The veratrum (uncombined) lowered the pulse to 68, and re moved the cough entirely. During this period, he occasionally suspended the medicine, and found that very soon the pulse would rise to its former frequency, and the cough would return, to disappear again on the re-administration of the medicine. Finally, the lady refused to take the veratrum, and the consequence was, that she died soon after, as he had predicted in the event of her discontinuing it. When combined with an opiate, it produces very little nausea. It is not so depressing as antimony, and may be safely used in cases where antimony is inadmissible. Recommended its use in typhoid fever, Had witnessed its good effects in a case of typhus fever. It controlled arterial action without nausea, and according to his observation, it controlled as promptly with, as without opium. He had cured a case of covulsions with it—the convulsions occurred in a young lady; she had *paroxysms almost daily* for two or three years, He gave the veratrum combined with valerian; the convulsions gradually become lighter under the use of the medicine, and soon wholly disappeared.

*Dr. Armor* had listened with interest to the Report of Dr. C.'s experiments. As yet, but few experiments had been made with this agent on the lower animals, and our knowledge of its effect on the human system was confined to the diseased state. It is important to obtain all the facts that can be developed in relation to a subject of this kind. Every fact contains an elment of usefulness, and though considered in its isolated state, in may be worthless, yet when conjoined with other facts of similar nature, it furnishes the material out of which and upon which the truths of science are established.

The experiments detailed contain evidence of one fact, namely, that veratrum tends to produce death at the heart, by virtue of its depressing influence on that organ. This single fact would teach us the propriety of avoiding its use in all diseases which tend to produce death at the heart. In this class we, of course, would include typhus and typhoid fever and all forms of asthenic disease.

In active inflammatory disease, it is very desirable to quell the violence of the heart's action, and in such cases veratrum will do good as an antiphlogistic. It should not be used where there is any local congestion, as it would be apt to increase the stasis of the blood. Its action on the arterial system was not to be doubted, but whether the veratrum acted directly or through the ganglionic nerves of the vascular system, he was not prepared to say.

If there was organic disease of the heart, the veratrum, in his opinion' would be a dangerous remedy. It was powerful for good or evil, and should be used cautiously. He had never witnessed any cumulative effect on the brain or cord, as was met with in the use of digitalis. He had frequently administered it without any perceptible result. Once he kept a patient on the use of it for some days without at all affecting the pulse; and this led him to remark that there might be an error in attributing its inactivity in certain cases to the controlling influence of opium

*Dr Carey's* views of the properties of veratrum had been confirmed and enlarged by his experiments. He would not use the remedy where there was mechanical obstruction to the heart's action, neither would he commend its use in asthenic cases. The controlling influence of opium over the action of veratrum, when administered in combination, was evident from his experiments, and accorded with his experience in practice. A patient who had been using morphia, took the veratrum in full doses without the ordinary effect. He administered it to another patient in combination with laudanum, and the pulse remained unchanged. He had given it, in the same combination to a female who had diarrhea, and was threatened with mammary abcess. She was cured, but the specific action of veratrum was not manifested in her case. He had always found veratrum act as certainly, as efficiently, and as rapidly as any other article of the materia medica. The remedy gave him complete control over the pulse. He could hold it at 40, 50, or 70 as he pleased, and as long as he pleased. Its full action is often unattended with nausea—the depressing effects soon subside. Never noticed any cumulative tendency, except in one case. Uses it freely in inflammatory diseases, in rheumatism, pneumonia, etc. He has found it to allay the constitutional excitement of parturient women, better that anything else. It cures the *weed* like a charm, often producing through the mother anodyne influence on the child.

*Dr. Reeve* thought if veratrum viride had a voice, it would exclaim, "Save me from my friends." Some of the speakers seemed to have laid aside all reason and moderation in their admiration of the wonderful virtues of this drug. We have heard how a baby went promptly to sleep after nursing, because the mother had taken veratrum. This must seem a strange assertion to those who knew, as he did, that all babies are in the habit of falling asleep after nursing, even when no medicine has been administered to the mother. He deprecated the practice of giving veratrum to allay the constitional excitement following labor. He had always been accustomed to see mothers pass safely through this excitement without the aid of veratrum, or indeed of any other medicine. He thought no medication was the best practice in such cases.

*Dr. Carey* explained by saying that he was not in the habit of giving the medicine to all females after their delivery, as was insinuated—but only to those cases where there was high febrile excitement.

*Dr. Reeve* thought the veratrum might be used in some cases with advantage. He was desirous that observation and conclusions should be made with more care. Such crude experiments and unwarrantable deductions would not draw him away from the use of medicines which he had hitherto been accustomed to rely on.

*Dr. T. Brennan*, having never used veratrum, had no prejudices *pro* or *con.*, and therefore considered himself in a better condition to pass judgment upon its merits than were those gentlemen who, in their blind enthusiasm, had been led to attribute to this agent all the good result that follow its use. This *post hoc, ergo propter hoc* style of reasoning had been the grand fallacy of the medical profession in all ages, and is still the most fruitful source of error. One would suppose, from the way some of the gentlemen talk of this new remedy, that their patients would all have died had it not been for its magical effects; and some of its admirers seem utterly at a loss to conceive how any body recovered from sickness prior to its discovery.

He had listened attentively to the report of Dr. C. He had great regard for the Doctor, but his love for scientific truth was greater, and he felt constrained to say that the experiments made upon the innocent dogs had no practical value, and shed no ray of light on the therapeutical properties of veratrum.

He was not prepared to admit that a medicine forced down the throat or up the rectum of a *well* dog would produce the same symptoms that it would do in one of us if we were sick and took it. The dog must be *sick* too before he would admit the completeness of the analogy. He had no faith in this cruel and fatal drugging of dogs. Such experiments might affect the price of sausages, but he was very confident it would add nothing to our stock of scientific knowledge.

His young friend on the right seemed to regard veratrum as a panacea. We are told that mothers keep it on the shelf and give a few drops to the children on the first approaceh of disease, and cure them instantly. If all that is claimed for the remedy is true, there will be no futher need for Doctors. Every old woman can doctor her own household, and we shall find ourselves in the condition of Othello. This would be a sad catastrophe!

The conflicting testimony which the advocates of veratrum have given is rather amusing. He feared it would injure the sale of Norwood's tincture. Some of its friends would use it freely in all sthenic cases, but pronounced it dangerous in asthenic cases; some would use it in asthenic cases, and pronounced it valuable in almost every case; others were opposed to its use in any case. He included himself in the last named class. Common sense would forbid the use of so depressing an agent in asthenic forms of disease; a man in a weak, sinking state is not to be cured by making weaker. To give it in the sthenic state, would only make bad worse—it would convert the case from sthenic. According to his experience, people usually died in the asthenic state, and when he had a patient in the sthenic state, he tried to keep him there. Gentlemen might smile—but he would assure them he had never lost a patient in the sthenic state, and he would venture to say that he had lost as many as some of his neighbors.

His chief difficulty in treating the sick was to combat the downward tendency—to maintain the activity of the vital forces. If the gentlemen would give quinine in pneumonia, and good whisky punch in typhoid, they would lighten the labors of the undertaker. All diseases in this region require to be treated with tonics and stimulants. * * It is strange to what absurdity men's enthusiasm will sometimes lead them.—

One of the brethren had related the case of a young lady who stopped taking the medicine at a time when it was exerting the happiest influence on her diseased heart. The Doctor threatened her with death and a coffin in case she discontinued the medicine. She however, persisted in her refusal, and died soon after. Now, if the veratrum in this instance had so happy and salutary an effect on the lady's heart, as the Doctor says, how very strangely it must have operated on her mind, that she should abandon it at such a time, and in utter disregard of the Doctor's fearful prognosis. As the lady evinced good sense when she applied to the Doctor for relief, are we not warranted in the inference that the veratrum made her crazy? He was sorry friend Carey had not noted whether there was any evidence of mental aberration in the dogs while undergoing the experiments. In conclusion, he would say that veratrum was a humbug, that those who believed in its wonderful efficacy are humbugged, that Norwood, who revived the use of it, is a humbugger, and that the poor patients who have to swallow it are egregiously humbugged.

*Dr. Koogler* thought the veratrum as uncertain as digitalis. He admitted its value in certain cases, but said it was difficult to determine in what particular cases its administration would be beneficial. He did not use it—being unwilling to discard known and reliable remedies for one about which there is so much doubt and contrariety of opinion.

*Dr. Brenton* read an essay on Uterine Hemorrhage, which elicited some discussion.

A case of *delirium tremens* treated successfully by Norwood's Tincture, was reported; the case occurred in the practice of Dr. Clements.

*Dr. Carey*, who had been appointed to prepare an address on the character of the late Dr. Koehne, discharged this duty in a manner which reflected much credit on himself as well as on the memory of the deceased. We suppose the address will be published.

*Drs. Grundy* and *Denise* were appointed Essayists for the next quarterly meeting.

*Dr. Davis* annonnced the death of D. B. Van Tuyl, M. D., of Indiana, an honorary member of the Society. He also presented a series of resolutions referring in appropriate terms to the eminent qualities of the deceased, and expressing the deep regret which the Society experienced on learning the death of an honored brother.—*Cincinnati Lancet & Obs'r.*

## *Remarks on that Form of Moral Insanity called Dipsomania, and the Legality of its Treatment by Isolation.* By David Skae, M. D., F. R. C. S., Physician to the Royal Edinburgh Asylum for the Insane.* (Read at the Medico-Chirurgical Society, January 20, 1858.)

A man is a drunkard who gets drunk at the festive board—who seeks occasions for getting conveniently drunk without interfering with his ordinary occupations—who takes a few days' drinking at a time when he has plenty of money, and returns to his duties and employment when he has finished his superfluous cash and his "ramble," or "spree," as it is called among the humbler classes in Scotland. Some men, on the other hand get systematically and regularly drunk every day after dinner, some every night before going to bed, and will perform their daily duties with propriety and efficiency. There is a large class who drink continuously, and consume large quantities of stimulants and seem to have a constant craving for them, which they satisfy by constant potations; yet they do not come under the denomination of insane drinkers; they exercise a certain amount of self-control, a sufficient amount of restraint upon their appetites not to allow the quantity which they drink to affect their aptitude for business or driving a good bargain. These are the decorous drunkards of society, and some of them are perhaps the hardest drinkers of any.

The effects of intoxicating drinks vary very much, as is well known, in different individuals according to the temperament or some peculiarity in the constitution. Some men get hilarious and others stupid; some become amorous and others maudlin in their cups; and some, again, become pugnacious, and even dangerous. It has been often observed, that men who have suffered from severe blows or injuries of the head become very violent, and even maniacal, when intoxicated. Such persons as these frequently come under the notice of the legal authorities, for acts of violence committed while intoxicated. But, in these cases, if the individual has voluntarily become intoxicated, knowing that in that state he is liable to be dangerous, he is justly held amenable to punishment for acts of violence committed when drunk. The responsibility of a person of this kind for any of the consequences of his getting drunk, knowing what may ensue, has been compared to that of a person firing a gun out of a window into a crowded street, who would unquestionably be pun-

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[* The propriety of any attempt to treat obstinate drunkenness by forcible confinement, is a question of great and increasing importance to the profession and to the public. We have, therefore, made large extracts from the able article published by Dr. Skae, in a late number of the Edinburgh Medical Journal.—*Ed.*]

ished for the effects which resulted from his folly. It would be a tedious task to describe all the different effects and kinds of drunkenness. It may suffice to say, that in all cases of mere drunkenness, the characteristic feature, as distinguishing them from insane drinking, is the preservation of the power of self-control. In the mere drunkard, there is a method in his madness; it is a systematised or regulated, or at least a voluntary habit. A morbid craving may be, and is generated, after drunkenness becomes a habit; but it is regulated, as to the time, and mode, and extent, and frequency of gratifying it, by certain considerations—such as a regard to outward decency, to the duties of life, or to the calls of business. And it continues to be so regulated, perhaps by a very low standard, and by one which is gradually made lower and lower; but still the habit is regulated and controlled as long as the person is merely a drunkard, and until the habit degenerates into a disease.

The principal, the diagnostic feature of this disease— that of insane drinking, dipsomania, or oinomania—is on the other hand, the absence or loss of the power of self-control or self-regulation. Persons affected with this form of moral insanity do not drink from the pleasure which the social board affords, but, on the contrary, will not unfrequently preserve a certain amount of decorum while in company. Neither do they drink for the pleasure which the wine gives them; they will drink any kind of intoxicating stuff. Nor do they drink at a convenient time and place, and only occasionally; they drink as often as they can, and whenever they can, and as much as they can; their craving for stimulants is incessant and incontrollable; no considerations of self-respect, no regard to public opinion, or common decency; or domestic ties, or religion or the certainty of impending ruin, degradation, or even the fear of death, can prevent their drinking till they can drink no longer . Such persons will often deplore their fatality, their inability to control ther desires, and will say, with tears in their eyes, as some have done, that if hell were yawning at one side of them, and a bottle of brandy standing at the other, they would drink. although the next moment they were to be thrown into the bottomless abyss. In fine, such persons drink because they cannot help it; and if they really cannot help it, they must be regarded as no longer responsible agents—as therefore insane, and proper objects for being restrained and protected against themselves.

The loss of self-control is, indeed, the most essential condition of almost all cases of insanity. The most constant symptoms of insanity are those referable to altered affections, perverted desires, and morbid propensities. Delusions, so much dwelt upon by some writers, particularly among legal authorities, as essential to insanity, are but its accidental concomitants like hallucinations of the senses. Every form of madness, from acute mania down to dementia, may be met with where there are no delusions. In mania there may be a morbid exaltation of all the emotions and passions over which self-control is entirely lost, and the individual riots in unrestrained laughter, singing, anger, destructiveness, and violence. The loss of control may extend to the thoughts and ideas, which succeed each other with extraordinary rapidity and give rise to incessant talking and incoherence. In partial insanity, one particular emotion or desire may be morbidly excited, and we may find a deep melancholy and depression without any delusion—a hopeless but abstract gloom, leading, by the total overthrow of the power of self-control, to an act of suicide There may be, as has been fully established by numerous well authenticated cases, a morbid impulse to destroy life, without any delusion, an impulse over which the affected person loses all control, and under which he commits some homicidal act. The morbid excitment of the sexual appetite only becomes insanity when the person loses self-control, and the victim of satariasis or nymphomania outrages all considerations not alone of morality, but of ordinary decency and the common instincts of humanity,

It is, in fact, the loss of control over morbidly excited passions, whether of an exalted or depressing kind, that constitutes insanity, and distinguishes it from ordinary excitement or depression. So it is with insane drinking; it is the loss of control over the morbid appetite that distinguishes it from ordinary drunkenness, and constitutes it a form of moral insanity.

I prefer the term moral insanity, in describing this disease, to the terms oinomania or dipsomania, for three reasons: First, because neither of these names conveys a correct idea of the disease, which is not an insane thirst, nor a thirst for wine only, but may consist in a morbid craving for stimulants or narcotics of any kind; second, because it is under the denomination of moral insanity that this disease is recognized by the commissioners in lunacy for England; and thirdly, for the most important reason of any, namely, that the craving for stimulants is generally only one of many symptoms of moral perversion which characterize the disease, and which it is of great importance to recognize, as they render the duties of the medical attendant comparatively easy, when they are met with in any particular case.

Of these other symptoms of moral perversion, the most common is the habit of lying. In almost all cases of this variety of moral insanity, there is a total disregard for truth. Such persons are singularly mendacious. They will resort to every possible device to procure stimulants, to excuse their conduct, to deceive their friends and medical attendant, and will display an ingenuity and fertility in deceit which is truly marvelous. They will become faint, or be in agony with toothache, or tic, or cramp in the stomach, or colic, or dysmenorrhœa, or they will take diarrhœa or hæmorrhage, and be on the verge of dissolutions, unless brandy, wine, or opium is administered. They will pawn every available article of dress, or furniture, or jewelry. They will borrow from servants or cabmen. They will get whisky smuggled home with their clothes from the tailor or the laundress. They will evade the most vigilant surveillance, and tell the most deliberate falsehoods in their attempts to deceive, solemnly appealing to God for their truth. When shut off from the ordinary sources of stimulation, they will sometimes resort to almost any thing in order to relieve their craving. I have known a young and delicate lady, being prevented getting wine or spirits, and deprived of red lavender, lavender water, and eau de cologne, take creosote, vinegar, vitriol, and tobacco.

Allied to this disregard of truth is the total denial, often insisted upon by such persons, of their habit of over indulgence. They will very frequently disavow most solemnly having ever exceeded the bounds of strict temperance in their use of stimulants; and, if admitting at all that they ever have been the worse of drink, they will blame some other person or circumstance as the cause of it. The wife will blame the husband; the husband, the accident of meeting on one particular occasion some one, or being engaged in some circumstances which rendered it unavoidable. And in this way, one or two undeniable overt acts of intemperance are conceded, when it cannot be avoided, while the habit or the loss of self-control is generally indignantly denied, except at moments of remorse.

Accompanying this disregard of truth, there are often other indications of moral perversion in the insane drunkard, such as extreme licentiousness, or a propensity to theft, or a delight in fomenting quarrels and creating mischief by leading other parties into trouble.

Again, this disease is very frequently met with in persons presenting certain mental peculiarities which are natural to them, that is, congenital. It is by no means uncommon to find it develop itself in youth, who have always been regarded as having a want about them, to use a vernacular phrase. They have never made progress in their education like others of their age—have never, perhaps, been able to learn to spell, and so forth; and, although illiterate and ignorant when they come to manhood, are often very vain, and at the same time credulous and silly. Or, again, they have been characterized, even from childhood, by certain perversities of disposition, such as a delight in cruelty to animals, disregard of personal appearance, love of solitary and gratuitious destructiveness, extreme obstinacy and selfishness, or a violent and mutinous temper upon slight occasion.

Lastly, the disease is very frequently hereditary; and it will be found, on enquiry, that a grand father, or mother, or one or more brothers, have died of delirium tremens, or have otherwise shown the fatal propensity. The constancy with which the hereditary predisposition to this disease is transmitted, is most remarkable, and, in a vast majority of cases can be traced either through the maternal or paternal side of the family.

To illustrate the truth of these remarks, I have analyzed the record of 86 of the cases of this form of moral insanity which I have had under my care, of which 20 were females and 66 males. I find, as the result of these comparisons, that of the 20 females one-half presented natural peculiarities in their mental constitution, being either of weak minds, of very violent and uncontrollable passions, or subject to hysterical attacks of great violence, combined in some instances with great moral depravity.

Of the males, 30, or nearly one-half, were naturally of weak mind, or presented some mental peculiarity, such as silly vanity, general depravity of disposition, and in some cases, considerable talent, but combined with eccentricity or some marked peculiarity. In both sexes, the disregard of truth was a common feature in most cases.

In regard to hereditary predisposition, it is difficult generally to trace this in a public hospital, partly because many cases come in without any information regarding them at all, and partly because the friends, when they have friends, are generally very solicitous to deny or conceal the existence of a hereditary taint in the family, and will not unfrequently positively deny that any other member of the family is insane, while, perhaps, at the time there may be another in one asylum and a sister in another. Notwithstanding these difficulties, I find the hereditary predisposition distinctly traced in 32 cases out of the 86.

Of the females, this hereditary taint was found to exist in 10 out of 20. One had a brother insane; one a mother half witted; one had two cousins who died of intemperance; another had a father and mother who were both intemperate; another had a father, and another a father and brother, who were hard drinkers; three had mothers who died from the effects of intemperance; one had two sisters, both prostitutes and drunkards, one of whom committed suicide; and another had a brother, father mother. all intemperate, and the latter of whom committed suicide.

Of the males, two had brothers affected with the same disease in the asylum, and three brothers who had the same disease, but were not sent to any asylum; one had repeatedly attempted suicide, and inherited, with his whole family, a loathing of life, which at times affected all the members of his family. Four had brothers who suffered from other forms of insanity; two had each two brothers insane; three had insane sisters; two drunken fathers; one a drunken father and brother, and one a father and grand mother, drunkards; and of several others it was admitted that insanity was in the family, although the relationship of the members affected was not ascertained.

Before discussing the question of treatment, and isolation in an asylum or special establishment, it is neccessary to complete this sketch by enumerating briefly the varieties of this form of moral insanity, and the causes which induce the disease.

Its varieties group themselves naturally into three division—the acute, the periodic, and the chronic forms of the malady.

Under the head of acute, I would include all those cases of incontrollable drinking which occur to persons of previously temperate or regular habits, but in whom the insane craving has been generated under the influence of some accidental cause—such as the novelty and excitment of a new sphere of duty, and the temptations of new associates and habits, all combining to lead to intemperance; or the depressing effects of some overwhelming calamity, or of some debilitating accident, or disease, or other agency, such as excessive hœmorrhage, protracted nursing, fever, and such like. It is well known that the use of stimulants, begun and indulged, in under any of these circumstances, has gradually merged, in many instances, into an inordinate and uncontrolable craving, and an insatiable and destructive use of them.

Cases of this kind, however, if taken in time, and treated judiciously and firmly, are generally curable without recourse to any step for depriving the patient of his personal freedom.

Periodic or recurrent attacks of the disease are generally dependent upon some constitutional or hereditary peculiarity. Sometimes they occur at the critical age in females, and preserve a periodic form coinciding with the menstrual period. Sometimes they arise from injuries of the head. In many cases the cause is obscure.

Cases of this kind are less amenable to treatment than the former, particularly where there is a hereditary predisposition. They hardly justify confinement, however, or isolation from society. Where this has been tried, it has generally been found that the uncontrollable impulse comes back at its accustomed period, when the imposed restraint has been removed. Nor does this form of the disease interfere materially, in many cases, with the duties of life. Many individuals have distinguished themselves in literature, or in professional or mercantile life, who have been known for a long term of years to retire periodically into the privacy of their own chamber, and, after indulging this morbid appetite to satiety for a week or two in their voluntary seclusion, to reappear again on the stage of life, and pursue their usual avocations with credit and success. Such cases are perhaps rare, and more frequently it happens that the recurrence of the periodic form gradually degenerates into the chronic variety of the disease, the intervals becoming shorter and the attacks longer, until the intervals cease altogether, and a chronic disease or a fatal issue ensues.

It is the chronic form of this disease which is the least curable and most troublesome to manage. Here the craving for stimulants, brought on perhaps by indulgence and irregular habits, operating upon a constitution hereditary predisposed, becomes constant, insatiable and uncontrollable; and the daily or hourly indulgence suffers only now and then a temporary check by illness induced by it, by delirium tremens, or outbursts of mania.

I believe it is agreed by all parties, that this form of the disease can only be treated effectually by prolonged complete abstinence from all stimulants. This has been attempted in two ways; First, by boarding the patient in some house where, in consequence of its remoteness from places where ardent spirits or other stimulants can be procured, or where, by the stringent rules of the house, and the watchfulness of those connected with it, a barrier may be placed against attempts to gratify the morbid craving. Of the first kind is the boarding-house mentined by Dr. Christison in Skye, where for many years patients of this kind have been sent. Of the latter is the house of refuge in Edinburgh, which has been used for a number of years as a reformatory school for patients of the humbler classes affected with this disease. In addition to these houses, a number of individuals—clergyman, medical men and others, in different parts of the country—have been in the habit of taking boarders affected with this malady, with the view of curing them. In none of these places can the principle of treatment be efficiently carried out. The parties having charge of the patients have no legal authority to detain them, or to interfere with their personal freedom; and the consequence is, that they either leave before a sufficient length of time has elapsed to do any good, or they evade the surveillance under which they are placed, and manage to keep up the craving for stimulants by a constant system of smuggling and secret indulgence. It consists with my experience that this has been the result in all the institutions and houses of the kind mentioned, which I know of, in this country; and I believe every one will agree with me, who has had much experience in the treatment of this deplorable malady, that, in its chronic and confirmed form, complete absence from stimulants can only be effected by depriving the patient of his personal freedom.

In the present state of the law, this can only be done by obtaining a warrant for the detention of the patient in an asylum for the insane.—And this method of treatment is now very commonly adopted in well marked and obstinate cases. I think some medical men, particularly in the country and in provincial towns, still entertain doubts as to the propriety of granting certificates of insanity in such cases. But the scruples of such are gradually wearing away, as the disease becomes better known and more fully recognized as a variety of moral insanity. It is now found, accordingly, that in all the asylums of England, Ireland and Scotland, such, cases are constantly admitted, and regarded both by the medical superintendents, commissioners of lunacy, and the sheriffs of our counties, as the proper objects of asylum restraint.

The principal ground, however, upon which it is contended that some new legislative enactment is required for the treatment of the cases of moral insanity under consideration, is that they cannot be detained long enough in asylums, under the present laws, for the purpose of effecting a cure of the disease. In regard to this point, I must confess that the difficulties I have had chiefly to contend with are such as could be obviated by no new act of legislation. Such patients, when removed too soon, have been removed almost invariably by their own relatives, or on the advice of their own medical attendants. When they recover from the immediate effects of uncontrolled drinking, they appear so sane, they make so many plausible promises, and they are so full of self-reliance, that they generally succeed in persuading their friends that they ought to have a trial; or they try the art of intimidation—threaten to quarrel with their friends and cut them off without a shilling in their wills, unless they take them out, or threaten the medical attendants who consigned them to the asylum with actions of damages, unless they are immediately liberated, and so succeed in getting the one party or the other to recommend their liberation, rather than encounter the threatened alternatives. I cannot call to my recollection a single instance in which any such case of moral insanity has been ordered out of confinement by the legal authorities contrary to my advice, and before I considered the patient was justly entitled to a trial. I am quite willing to admit that, in many of the cases I have had under my care, the sheriff might have intimated his opinion that they ought to have a trial by being set at large, had his interference not been forestalled by that of the friends; but I feel confident that if such cases by premature liberation, had relapsed and been sent back, their detention would not have been interfered with during a very considerable period of probation. And admitting, as I do, the necessity of a pretty long period of confinement, extending even to one or two years, or even more, for the cure of confirmed and chronic cases of this moral insanity, I cannot but admit at the same time the justice and propriety of giving patients of this class a trial, after their first confinement, at the end of three or six months, if they give any thing like a reasonable hope of doing well, and if their powers of self-control have been tested with favorable results. It has been my practice, and I believe it has been that of the physicians of other chartered asylums, to test the powers of self-control of such patients, after they have been sufficiently weaned, by abstinence, from their morbid cravings—to permit them to go beyond the asylum on their parole, to visit their friends, to spend a day or two with their relatives, or even to lodge for a week or two in the neighborhood; and if they display, under those circumstances, the ability to control their appetites and regulate their conduct, then I consider myself bound to liberate them; while, on the other hand, if they break through the restraints imposed upon them by their own voluntary pledges, and are unable to keep their promises and purposes of temperance, I consider myself entitled to prolong their period of confinement, and in doing so I have never yet been interfered with by the arm of the law.

The practice in other parts of the empire may be different—the views which some sheriffs, or the views which our newly appointed commissioners in lunacy may take of such cases, may be different; but I do think, as the real nature of this deplorable disease becomes more fully known, the administration of the existing laws must expand, so as to permit all that can be properly and wisely asked as to the duration of time required for the effectual treatment of such cases, with a view to their complete cure of a morbid, and uncontrollable, and self-destroying appetite.

In fine, if the disease which we call moral insanity, or dipsomania, is not really a form of insanity, it would be very dangerous to legislate on the subject; but if it is a form of insanity—and of this, we have no doubt—the existing laws regarding the insane ought to meet the requirements for its treatment; and, by a liberal and enlightened administration of those laws, I do not doubt they will be found to do so, without the necessity for new legislation. If any thing more is wanted let some enterprising individual, or company, with a moderate capital, license a country-house surrounded with an agreeable landsape, and with grounds affording extended walks or drives, and the amusements of fishing and shooting; let the establishment command all the sources of recreation which a well arranged asylum possesses; and let it be designated by some appropriate and agreeable name—not "asylum," nor "inebriate asylum," like the American institution of the kind, which, I believe did not succeed; let the patients of this class be sent to that sanatorium under a warrant of the sheriff as insane; and let them be treated according to the most approved principles of our art, under the direction of an enlightened physician, with an efficient staff of trustworthy attendants; and let patients be taken at different rates of board, suitable to their means, and I doubt not most of the difficulties at present felt in dealing with this disease, if not all, will be successfully met, and that such an establishment would soon be distinguished for its usefulness, and prove a valuable source of revenue to its proprietors.—*Virginia Medical Journal.*

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*Illustrations of the reciprocal sympathies between the uterus and bladder in woman.* By W. F. Montgomery, M. D., read before the Medical Association of the College of Physicians, 4th November, 1857.

It is familiar to us all, that in the human female there is an intimate reciprocal sympathy between the uterus and bladder, and other parts of the urinary apparatus; so that, under a variety of circumstances, when the former organ is the seat of any anomalous action, or brought into a state of exalted sensibilty, whether from natural or morbid causes, the latter is not only liable, but very apt to sympathize, and suffer correspondingly.

This is constantly exemplified in the increased urinary irritation so often accompanying ordinary healthy menstruation, and still more remarkably, when the latter function happens to be painfully performed. Again, in early pregnancy, the same thing is observed; and the remark is trite, that morbid actions in the uterus, whether benign or otherwise, often have the earliest announcement of their invasion, in symptoms of disturbance first noticed in the functions of the bladder.

Thus, congestion or slight ulceration of the cervix uteri, and still more strikingly, malignant affections of that part, frequently excite, in the first instance, in the patient's mind, only apprehensions of gravel, or some vesical disease, for which alone she is induced to seek advice; but woe betide us, in this and many other circumstances, if we let ourselves be beguiled into the belief that because a particular organ or locality is affected with certain anomalous symptoms, it is therefore the seat of some disease, of which these symptoms are to be taken as indications; and so prescribe. Could we, for instance, expect to cure the itching of the nose and angle of the eye which accompanies the presence of intestinal worms, by applications to the Schneiderian, or conjunctival membrane?

Mrs. C. had, for a long time, intense, intolerable, distracting itching of the perineum and anus, which really rendered her life miserable, and for which she had consulted many, and used a multiplicity of remedies; many of them, no doubt, very appropriate for pruritus, but not for her. When she came under my care, I also, at first, adopted the wrong course; I prescribed for the symptom, and not for its cause. But fortunately, after seeing her a few times, something led me to suspect the existence of intestinal worms. I gave her a dose of the kousso, which caused the expulsion of some very large lumbrici, and all her troubles were forthwith at an end.

Mrs. M. consulted me for pruritus of the pudendum, from which she suffered to such a degree, and it was accompanied with other symptoms of so distressing a kind, that she declared she loathed herself, and felt her life an intolerable burthen to her. She had used gallons of lotions, and all sorts of ointments, without the slightest relief. Examination showed an intense congestion of the cervix uteri; this was made the object of treatment, and on its removal, the pruritus and its miserable concomitants totally ceased.

I have already called the consent between the uterus and bladder a reciprocal sympathy, because it equally acts in the reverse direction, irritations of the bladder being frequently found to influence and disturb the functions of the uterus—a fact which should not be forgotten in practice, and especially in the treatment of the diseases of pregnancy, when the administration of the more irritating diuretics should be avoided, lest they should excite contraction of the fibres of the uterus, and so induce premature expulsion of its contents. That they are capable of so doing is, unfortunately, popularly known, and advantage is taken of such knowledge for base and wicked purposes.

And again, we must remember that vesical disturbances may produce a group of symptoms so closely resembling those arising from disease of the uterus, as to be mistaken for them.

Several years ago, there occurred in this city a case forcibly illustrative of this, and which excited no small sensation. The wife of a general officer, at that time holding the highest military command in this country, began to complain of distressing symptoms, having all the characters of those produced by uterine disease. Such was her own conviction, and on her consulting an accoucheur, then in large and high practice, her worst fears were confirmed; he pronounced the affection to be cancer uteri, and could only promise palliation. But she had many anxious friends, whose happy privilege it is always to hope for the best, and some of them urged upon her the necessity of having another opinion; to this she at last consented, and the gentleman called in pronounced the case to be one of stone in the bladder; the stone was extracted, and the lady passed at once from a state of pain and misery to one of comfort and happiness.

A few years since, a patient came to consult me, stating that, to gratify her friends, she had come to town for my advice, although quite aware that she could not be cured. She also handed me a written statement of her case, which set forth that she had had seven labors of terrible severity, owing to contracted pelvis, always requiring instrumental delivery; that for some months she had exhibited unequivocal symptoms of the existence of cancer uteri; and I confess that, from this account and the woman's own description of her symptoms, I thought there was little room for doubt as to the nature of her malady. However, I, of course, gave no opinion, and suspended my judgment until I should have instituted a careful examination; on doing so, I could discover no disease of the uterus, but the neck of the bladder was distended and felt very hard. I passed a sound into it, which at once struck against a stone of considerable size. Mr. Fleming now saw the case with me, the stone was removed, and the woman soon returned home well, and continued so.

It is not my intention to enter into a lengthened exposition of all the details of this part of our subject, but only to ask the attention of this distinguished meeting for a few minutes, while I review, as briefly as may be, some forms of disturbance of the functions of the bladder occurring at the time of labor. And I may just premise, that considering the frequency with which we witness such interchange of sympathies as we have been hitherto discussing, and their production, in many instances, from comparatively unimportant causes, we would anticipate from the close relation of juxtaposition between the uterus and bladder, and from the direct exposure of the latter organ to the powerful mechanical efforts cf the uterus, as well as from the marvelous anatomical and physiological changes taking place in the latter, during pregnancy and parturition, and immediately after—we would, I say, be led to expect that the innervation and powers of the bladder would be likely to exhibit still more marked and decided evidences of impairment, or some other abnormal condition, in the puerperal woman; and accordingly, in practice, we find that there are, at least, four forms of disturbance of the functions of the bladder, which are not unfrequently produced by parturition, even when that process is easy and natural:

1st. Irritability, causing an inconveniently frequent desire to discharge its contents; and this with a certain amount of pain.

2d. Loss of expulsive power; the natural sensibility being unaffected.

3d. Total loss of the natural sensibility, or irritability, which prompts to the evacuation of the contents of the organ.

4th. A peculiar form of hysterical retention.

The first two of these states require little more than to be glanced at; the third and fourth demand a somewhat more particular consideration.

1st. The irritability of the bladder which succeeds labor, almost always, yields readily to soothing measures, such as warm anodyne fomentations, a linseeed meal poultice, opiate and camphorated embrocations, an opiate suppository in the rectum, or the administration of the mist. camphoræ c. magnesia, with tincture of hyoscyamus and syrup of poppy. Should there be reason for suspecting inflammation, it may be necessary to apply a few leeches, and use other appropriate remedies; but this is rarely the case.

2d. When the expulsive power is in abeyance, but the natural sensitive irritability remains unimpaired, the desire to evacuate the contents of the organ becomes distressingly urgent, in proportion to the amount of accumulation within it.

This condition is sometimes produced by pressure from the uterus happening to be larger or lower than usual, perhaps displaced, or from the presence of an uterine tumor, in which case, raising up the obstacle may remove all difficulty. Sometimes, merely permitting the patient to assume the sitting position may suffice. Should these plans not succeed, the introduction of the catheter gives the desired relief.

3d. Again, there is the third and most important variety, in which there is no irritability, not even the natural desire to evacuate the urine, nor sensation, nor consciousness of requiring to do so, although a large accumulation is taking place, which will soon produce symptoms, not alone very distressing in themselves, but, what is worse, conditions which may lead us greatly astray, and excite groundless apprehensions of great impending danger; and it will not lighten our discomfort, should it turn out, as has often happened, that the patient owes all her annoyance to our inadvertence, or the carelessness of the nurse-tender; for if we are careful in making the requisite enquiries, and give the proper directions to the nurse, and she attend to them, the accident, of which I am about to speak could not happen.

The first time I remember to have had my attention drawn to this condition was in the year 1832, and in the case of an esteemed medical friend's wife; who was delivered of her first child, after a natural labor of fifteen hours, presenting nothing unusual, if we except the most tremendous rigor I ever witnessed, which occurred shortly after delivery, and was so violent that I really thought it must have ended in convulsions; but simple means removed it, and she went on well. Before leaving her. I cautioned the nurse to encourage the lady to pass water in the course of the evening, as she had not done so for several hours; this, however, was neglected, as the lady neither expressed, nor felt any want; and, at my next visit, I found my patient very feverish, with headache; a pulse above 120; the belly tumid and tender to the touch. Before proceeding to introduce the catheter, of which she had a great horror, I advised her trying to pass water, which she did, to the amount of at least two quarts, with instant relief to all the symptoms. Her convalescence was uninterrupted.

At a time when there were occurring several cases of puerperal fever through town, a medical friend called on me to request that I would accompany him to visit a patient of his, who had been confined two days previously, after a severe and protracted labor. She was not going on well, and he thought he had to deal with a case of the above mentioned formidable disease, as his patient was very feverish, had most distressing headache a rapid pulse, with abdominal pain, swelling and tenderness.—On seeing her, I thought the presence of a large quantity of fluid was beyond doubt; a catheter was introduced, and an enormous accumulation of urine withdrawn, with immediate and decided relief to all the symptoms. It was then ascertained, that she had not passed water since her confinement, nor for many hours before it; she recovered perfectly.

The next case occurred to me under circumstances which invested it with a very unusual interest, and caused it to make a great impression on me. I happened to be staying for a few days in a very fashionable watering place in England, where there resided a family of great wealth and consideration in society; the eldest son of which had married a lady of fortune and high connection. This lady had recently been confined of her first child; and, as may be readily supposed, the attendance upon her had been a matter of warm ambition among the local practitioners; and the gentleman who carried off the prize was, I fancy, more envied than congratulated by his confreres.

I met this gentleman accidentally in society, and the following morning he called on me in a state of painful agitation and distress; "I am," he said, "in a terrible dilemma, and fear I am a ruined man." He then proceeded to tell me that he had attended Mrs. *** three days before; that she had rather a severe labor; and that at the end of thirty hours, finding the labor not likely to terminate by the natural efforts, the head having remained stationary for several hours low down in the pelvis, and pressed strongly against its floor, he had delivered her with the forceps, without, as he assured me, any difficulty whatever. All then seemed well; but next day, the lady was uncomfortable, restless, feverish, and rather larger than she ought to be, and this state went on increasing until the third or fourth day, when, to his horror, the urine began to trickle away incessantly, and a slough, about the size of a sixpence, was discharged from the vagina. He at once, naturally enough, concluded that a vesical fistula was established; and I, taking his account as my guide, thought there was but little doubt that his worst apprehensions would be realized.

At his urgent request, I accompanied him to visit the lady, whom I found with a hot skin, much headache, a very quick pulse, a very distended abdomen, which was moreover so tender that she could hardly bear it to be touched; but I distinctly ascertained the presence of fluid. On examining per vaginam, I could not detect by the finger any breach of surface along the anterior wall, or back of the bladder, and I suggested to Mr. *** that it would be well to pass a catheter into the bladder; which, at his request, I did; and gave exit to a quantity of urine, sufficient nearly to fill an ordinary wash-pan basin. Subsidence of the abdominal swelling immediately took place, the lady felt inexpressible relief, and from this day went on well.

The truth was, that the bladder had been forgotten by all the parties concerned; and the patient had never passed water since her confinement, nor felt a desire to do so, until at last the bladder became so distended, that the resistance at its neck was overcome, and the urine leaked out at the front as fast as it was pumped in from the ureters at the back; and it so happened that, just as this began, a small slough had separated from the mucous membrane of the posterior wall of the vagina, which had been strongly pressed on by the head for several hours.

4th. Another state, not exactly ranging under any of the former kinds, seems to be of a purely nervous or hysterical character, and mixed up with a certain amount of mauvaise honte. The patient has a decided desire to pass water, and suffers distress from its retention*; but has, at the same time, the greatest reluctance to make the neccessary effort, and positively refuses to try, if any one, even the nurse-tender, is present, declaring that it would be impossible for her to succeed.

Under those circumstances, suitable arrangements should be made by the nurse, and the patient then left by herself, for a time, during which she may succeed in accomplishing the desired object; if she does not, some anti-nervous medicine should be given, with strong assurances of its potency in removing such difficulties; let her try again during our absence, and if she has not succeeded when we come to pay our next visit, we must declare that longer delay would be unsafe, that we will wait a little while in the drawing-room, and if she does not then succeed, that we must draw off the water before we leave the house; this generally insures success.

In many of these cases they do not succeed, because they do not make the proper effort; and this, I believe, is oftentimes, simply because they cannot, and not always because they do not, choose; this state of nervous inability ought to meet with much tender consideration. I may observe here, that I have never met with this peculiar form of affection, except in the higher grades of society, and almost always in women of a highly sensitive nervous temperament, some of them have experienced a similar difficulty before marriage, and also under ordinary circumstances distinct from pregnancy.

Now, is this state which I have just been attempting to describe, analogous to, or identical with another, which I have a few times met with in practice, and which may be thus described ?—A lady in perfect health retires to her bed room for the night, and before lying down to rest, attempts to make water, and finds she cannot—she is much surprised—goes to bed, and perhaps falls asleep; in the morning, she is in great distress; but still unable to empty the bladder, and now her pain is so great, she is compelled to seek for assistance—the catheter is introduced, and all her trouble is at an end; or, perhaps, for several days, its use continues to be required, and then all goes on as well as ever; but, in either case, no circumstance of general ill health, or local derangement or displacement, can be discovered. The woman, in fact, is otherwise quite well.

The year before last a married lady of a highly nervous temperament, so affected, drove six miles into town to a house, in great torture: I drew off the water, and she required no further assistance.

Last year, I was urgently summoned to see an equally nervous maiden lady similarly situated; on laying my hand on the abdomen, I felt a tumor, as large as a melon, and as hard as a cricket ball; and per vaginam, it really, at first, suggested the idea of a fibrous tumor of the uterus, this organ being quite displaced. I introduced the catheter, drew off a large accumulation of urine, and the abdominal tumor—which was nothing more than the distended bladder—at once disappeared. The feature in this case which particularly arrested my attention was, the extraordinary hardness and the distinct outline of the abdominal tumor, which would readily have caused it to be mistaken for a solid morbid growth.

I may here observe, that in the well known case of the virgin mock prophetess, Joanna Southcott, there was felt, by competent judges, a circumscribed tumor in the abdomen, which was supposed to be the gravid uterus. Dr. Reese, in his published history of the case, says: "In that part occupied by the womb, there was a firm circumscribed tumor as large as a man's head, bearing the shape of the womb; I had no doubt of its being an enlargement of that organ." But when she died, no tumor existed, and that which was felt during life was attributed to the prophetess having learned to retain the urine until the bladder became considerably distended; which seems highly probable.

In my case last related, it was necessary to relieve the lady every day for a week, when she perfectly regained the power of micturition. I may just mention, that the remedy which seemed to remove her inability was the ergot of rye. Did it do so by stimulating the fibres of the uterus in the first instance, and then, by consent, those of the bladder? Perhaps so; but as the same agent has produced a similar effect in men, a direct influence may be equally admitted.—*Dublin Hospital Gazette—Virginia Medical Journal.*

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## *The Hypophosphites.* By JAMES R. NICHOLS, M. D., Boston.

[Communicated for the Boston Medical and Surgical Journal.]

The importance of the element phosphorus in the human economy has not been fully appreciated until within quite a recent period. The amount present in the brain, as shown by investigations at the Cambridge laboratory, a few years since, is much larger than was supposed. Not only had the best chemists of Europe fallen into error in their estimations of the quantity of phosphorus, bus also in that of sulphur, the element so closely allied to phosphorus in its uses and chemical affinities.

The vital importance of these agents in maintaining a normal condition of the system can be understood by a consideration of the probable fact, that in all the operations of the mind, in every effort requiring an expenditure of nervous force, they are called into action. In their rapid oxidation in the brain, on occasions of great intellectual effort, there may be a nearer approximation to literal truth in the remark, that there are "thoughts that *burn*," than is generally supposed.

Not only is chemical science capable of pointing out the exact chemical constitution of the body, and the changes and transformations which are constantly occurring, but it has proved competent to direct us respecting the proper methods by which certain elements or agents may be furnished when pathological symptoms indicate an insufficient supply.

The use of that class of salts known as hypophosphites, offers the most direct and philosophical means of supplying phosphorus to the system. The small amount of oxygen in combination with this element in the hypophosphorous acid which unites with the alkaline carbonates, the bases of these salts, is favorable to easy decomposition in the economy. By the changes which result from further oxidation, nascent phosphorus and phosphates are liberated. The phosphorus thus set free is certainly in a condition most favorable to the fulfilment of its design and high office in the brain and nervous system. Whether the phosphates, as such, or by further change, are capable of exerting specific and desirable influence, must be regarded as a matter of some doubt, although they have been administered in the form of "syrups of the phosphates" for a considerable time, by distinguished physicians.

When the oxide of phosphorus is placed in contact with hot milk of lime, hypophosphite, phosphate and carbonate of lime, hydrogen and phosphuretted hydrogen result from the chemical changes which occur. The hypophosphite of lime is soluble, and remains in solution while the insoluble phosphate and carbonate are suspended, or fall to the bottom of the vessel as a precipitate. In the preparation of the hypophosphites, the usual method has been to boil the phosphorus of commerce in milk of lime until the formation of phosphuretted hydrogen ceases, then filtering the liquid, working the precipitate, and after concentrating the clear solution, allowing it to crystallize into a dry salt. Mr. Shaffer, of Louisville, proposes, in the last number of the *Journal of Pharmacy*, to first oxidize the phosphorus by a current of air thrown upon it, while fused under hot water, and then to place it in milk of lime, as in the former process, for the formation of the hypophosphite.

This process I have found tedious, and perhaps not less objectionable than the other. The product is not essentially larger. It may be much facilitated by employing a current of mingled air and steam in preparing the oxide of phosphorus, instead of the air current. The white vapors of phosphoric acid produced are very dense and abundant, and the process should be conducted under a strong draught. As an experiment, the passing of an air current upon melted phosphorus in water, is beautiful. The intensely vivid flame and streams of light, commingled with sparks, beneath the water, afford a pleasing spectacle, when the operation is conducted upon a large scale.

The alkaline hypophosphites of soda, potassa and ammonia are readily obtained by reaction with the lime salts. The iron salt may be obtained by precipitating a solution of hypophosphite of soda with one of sesquisulphate of iron.

As a source from which to supply phosphorus to the system, hypophosphorous acid must be regarded as of the highest importance. What phosphoric acid may have failed to do, in supplying the waste of phosphorus, it is almost certain that the acid containing the less amount of oxygen is capable of accomplishing. Uncombined with the alkalies, it should receive attention as a remedial agent.

It is undoubtedly the experience of medical gentlemen that most new chemical remedies fail to accomplish the expectations of the introducer, and therefore much hesitation may be expected in making trial of the hypophosphites, and the acid from which they result. Dr. Churchill, to whom we are indebted for calling attention to them, is confident that "they will occupy one of the most conspicuous places in the materia medica." "The effect of these salts," he says, "upon the tuberculous diathesis is immediate, the general symptoms of the disease disappearing with a rapidity which is really marvellous."

Although specifically prescribed for phthisis, by Dr. Churchill, it is evident their beneficial effects are not limited to this one variety of disease. They would seem to be most appropriate remedies in a large class of affections resulting from loss of nervous force, and perhaps in cases of mental aberration not resulting from family idiosyncracies; also in many of the diseases of infancy, where there is want of vital action, and where the osseous system is defective. A clear understanding of the chemical nature and characteristics of the remedies under discussion, will enable physicians to apply them in a large class of diseases where their use seems to be indicated.

The dose of these salts of lime, soda, potassa and ammonia, is about ten grains to adults, given two or three times in the twenty-four hours.— They may be combined in the form of syrup, or with lactose (sugar or milk,) or glycerine. All the salts are more or less deliquescent, and therefore it is important they should be placed under the protection of some agent capable of preserving them from change.

# EDITORIAL AND MISCELLANEOUS.

## Report of the Special Committee of the American Medical Association, upon Medical Education.

At the meeting of the American Medical Association, held in Nashville, in May, 1857, *two* most unprecedented acts of discourtesy were committed by the *controlling* influence in that body: 1st. The appointment of a *Special Committee* upon the *subject* of Medical Education, thus susperceding the *standing committee*, upon the same subject, and thus expressing in the most unequivocal manner, a want of confidence in the latter.

And, 2dly, in not only failing to appoint the mover of the resolutions, (Dr. Currey,) for the consideration of which the Special Committee was constituted, as the Chairman, but in addition, actually excluding him entirely from it.

As the result of this course of proceeding, we have the Report made at the late meeting of the Association, by Dr. Jas. R. Wood, of New York, certain points of which, we unhesitatingly declare our belief, to have originated with the University of Nashville, with the view of breaking down a troublesome competitor—the Atlanta Medical College.

Without going, at present, into a *detail* of the reasons for this conclusion, we would state, that this Institution had good reason previous to the meeting of 1857, (already referred to,) to *know* that it was the intention of the Nashville School, to make an effort to exclude her from the Association, having already attempted to discredit her with the profession.

This effort *was made* by (as we believe) *procuring* the introduction of a set of resolutions, the object of which was to exclude any Medical Institution from representation in the Association, where a student was graduated without an interval of six months between the courses of lectures which he had attended, though he might have been engaged in the study of

Medicine, not only three years, but an unlimited period, when at the same time, they were notoriously disregarding not only *time* but *qualification*, in their requisitions for graduation.

It is therefore, *not true*, as stated in the report of the Special Committee, that "at the late meeting of the Association, at Nashville, the subject of Medical Education was again *introduced** in a series of resolutions, denying that this Association has the power to control the subject of Medical Education, and deprecating any further agitation of it in this body." Such *resolutions were introduced*, but not until the subject of Medical Education had been "thrown (as a distinguished member of the Association remarked, who fully understood, and who had the best opportunity of knowing, *the object*,) as a firebrand into the Association."

The resolutions denying the power to the Association to *control* the subject of Medical Education contained nothing but the *truth*, and scarcely more than is admitted in this same *Special Report*, that "thus far, little has been accomplished but discussion and agitation. The Schools have been indisposed to adopt the proposed changes in their curriculum of studies, and *this Association has lacked the power to render obligatory its proposed reform.*"

But notwithstanding, this distinct and positive admission of the inefficiency of the Association in regulating this matter, and that its discussion had been mainly a source of discord, we have it declared in the same breath, that "it exercises by its moral force, a compulsory power."

We admit that the American Medical Association may regulate its own members, according to certain conditions and stipulations upon which they entered the body, and in addition, may and does exert a *moral influence* upon the Profession at large, but we cannot conceive any greater absurdity, than the idea of a "compulsory power," above and beyond rights and powers which have been *expressly granted*, and from which *alone* any controlling influence is derived. The Association has accomplished much for the Profession, and by confining itself within its legitimate sphere, may accomplish much more. It *has* a "moral power" which should be exercised with great care on account of its very influence—to be a true "moral power," however, it must have *justice* as one of its most important elements.

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* Italics are ours.

What does this report, which contends so strongly for this "moral power" of the Association, propose to do? We say unhesitatingly that in a prominent feature, it is but the embodiment of the plans and purposes of one portion of the Association to destroy another. Originating in a meeting of the Association *known* to have been controlled by the Nashville Medical School, and bearing unmistakeably the *impress* of its designs, it *proposes* to become the instrument of the grossest *injustice.*

We do not care to say that this feature was *dictated* directly by those with whom it *originated*, but we do say that it is only the execution of a purpose formed before, and developed at, the meeting of the Association in Nashville, to use the power of this body, to sap the foundations of a troublesome competitor, whose success was supposed to be dependent upon the *season of the year*, at which its sessions were held.

Again, what does this report, which echo's so strongly the views of the late retiring President, in reference to the "moral power" of the Association—himself, a member of the faculty of the Institution, to which we have alluded—propose to do? It proposes to adopt a *system* of Medical Education, which would throw discredit upon Institutions equally respectable where they are located, with those of any other section, the objectionable feature of the "system," at the same time, being based upon a *simple absurdity*, "that medicine can not be taught in the *summer*," and thus proposes to become the instrument of injustice and oppression, and the violator of sacred rights and privileges.

Again, we take issue with this report in its statement, as to the American Medical Association constituting a "National Congress," which of right "exercises an influence, and wields a power that has all the force and energy of a government," this claim being based, according to the author of this paper, "upon the consent of the governed, and on the equitable principle, that, in representative bodies, the majority must rule."

Take for instance the last meeting of the Association, at Washington City, the most National meeting ever held, and what do we find—New York, Pennsylvania and Massachusetts, constituting at least one-halt of the whole body, and possessing unquestionably the power to use the Association at pleasure. Has the profession of all the other States *consented to be governed* by the profession of these States, or of any others who *happened* to be in the ascendancy, in the Association. The body never can be a full and fair representation of the medical men of the United States, as in all its meetings, it will ever be made up to a large extent, of those who are most convenient, or who have the best facilities for reaching the place where it is held.

The South and West have taken comparatively little interest in the annual convocations of this body, the former, more particularly, may be said never to be *represented*, a number of the Southern States having no delegates in the last meeting. There is, therefore, no consent of the medical profession of the UnitedStates to be *governed* by the American Medical Association, and nothing upon which to found "the equitable principle belonging to representative bodies, that the majority must rule," and consequently no justice or propriety in the assumption that a majority in this body have at any time a right to *rule* in matters affecting the rights and interests of the mass of the profession, throughout this vast country.

Surely, New York and Pennsylvania, constituting nearly one-half of the late Association, will not say to us in Georgia, or Vermont, you shall not establish an Institution for the instruction of your own people in Medicine, except upon conditions prescribed by us; we claim the privilege in Georgia, at least, of organizing our own Institutions, without reference (as a matter of obligation) to those of other States. We get no patronage from the North—their Institutions have been largely built up by Southern contribution, which will doubtless to a considerable extent, in the folly of our own people, continue to be poured into their coffers, and we therefore claim the poor privilege of being allowed to educate *a portion* of the people, born upon our own soil, upon a plan that suits ourselves. Let each State regulate its own internal affairs, without interference from without, and if it is really the idea to have a National Association, ever respect the *rights of the States, in giving to the Profession of each individual State, the right and power of saying, who shall be recognized as medical men.* The American Medical Association will be far below what should be its high aims, when allowing itself to be used as an instrument of cliques or colleges to bring discredit upon any portion of the profession who are holding the same great truths, and have the same high objects in view, and in such a vocation, will assuredly find a speedy termination to its career.

We are honestly desirous to elevate the standard of medical education, and will ever be found uniting in any legitimate and practicable plan for this object. We are especially willing at all times to submit to the will of the masses of the profession, (as expressed through our local and State Societies) who can alone be competent judges of a system of education which is adapted to their own sections; but we have never yet brought ourselves to the conclusion, to submit to the *intrigues* of selfish competitors.

But it may be said that this report *allows* the "Medical Colleges an opportunity to consider the recommendations here advanced before any definite action is taken upon them;" to which we would reply, that this is poor consolation to those, upon whom an attempt has been made to cast an odium, and who would therefore go into a Convention under the most disadvantageous circumstances. If a Convention of the Colleges was the remedy for the difficulty, and if "their wisdom and mature views," were so important to a correct understanding and a proper arrangement of this subject, and if that harmony and concert action—from which alone any good could arise—was desired, why, we ask, make a suggestion striking at the very foundation of a portion of the schools, without giving any thing which could bear the name of a reason, for such recommendation? Because, we reply, it was a foregone conclusion, so far as this particular point of the report was concerned, and as such, entitled to no respect.

But to leave this feature of the report which deserves and receives our most unmitigated contempt, we would turn to another which meets our most unqualified approbation, and which *alone*, would have made a much more creditable report, than that which has been so elaborately prepared.

It is proposed to remove the diploma-granting power from the schools, and place it in the hands of an examining Board, the members of which shall have no College appointments. In this direction, as we have intimated upon a former occasion, lies the true remedy for the present admitted defects in our plan of Medical Education.

But while we admit that an improvement may be made in medical education, and that unqualified men enter the profession, we do not believe in the truth of the *stereotyped cry* of the inferiority of the Medical Profession of the United States—the forthcoming volume of the transactions of the American Medical Association, is of itself sufficient to brand it as slander. It has been too long the habit to decry our profession in this country, and to make invidious comparisons between the American and the European physicians, greatly to the discredit of the former—of this we are heartily tired, and claim for the regular medical men of our country, a full equality with those to be found any where, in practical knowledge and skill in the treatment of diseases, with which they have to contend. In conclusion of this desultory review of the report of the Special Committee upon medical education, before the late meeting of the American Medical Association, we would remark, that we have not intended, nor do we feel any special disrespect for its author, though believing, as already distinctly stated, that he has been made the tool (perhaps unwittingly) of designing men, who are looking more to the advancement of selfish purposes than to that of medical education.

If we believed that the present movement upon the subject of Medical Education, had arisen from a sincere desire to elevate the profession, we should unquestionably take a different view of the whole matter, and might be disposed to submit to many things which we should now scorn to consider, believing this as we do, only another mode of accomplishing a selfish and long cherished end, after every other has failed. We wish it, however, distinctly understood, that we speak for ourselves alone—what course the Institution with which we are connected may choose to pursue, we do not pretend to indicate—it may be represented in the Convention, and may find some acceptable system of medical education presented, but will unquestionably never submit to the *dictation* of those, whose *interest* it is, to change her policy.

There are other suggestions and recommendations in this report, which we regard as illiberal, visionary, and impracticable, to which, however, we do not propose giving any attention at present, farther than to remark, that it is perfectly manifest, that a strong effort is about to be made to sap the foundations of all medical schools, save those which are found in the larger cities, in the contest arising out of which, we shall confidently appeal to the masses of the profession, to stand up against the *dictation* and grasping selfishness of a *few* would-be "regulators" of medical affairs in the United States, who affect to have a supreme contempt for all medical education not obtained in certain Schools or *Hospitals* with which they happen to be connected.

## Preparatory Medical School.

The Faculty of the Atlanta Medical College, have determined to establish a *Preparatory Medical School*, in connection with this Institution. It will commence operations on the 1st Monday of November, and continue until the last of February, and will consist of Systematic Lectures (of a more elementary character than those of theregular course)—Examinations; and facilities for acquiring a knowledge of practical medicine, afforded by Hospital and Dispensary practice. The *Prepara-*

*tory* course will be conducted exclusively by the Faculty, for which a specific charge will be made, to be deducted, however, from the fees of the regular course. So that it will be perceived that the Atlanta Medical College, will hereafter give *eight months* instruction in medicine *annually*, for the same fees which they have heretofore charged for the usual term of four months. It is of course to be distinctly understood, that *this has no connection with the requisitions for graduation*, and will not be recognized as a *Regular* course of lectures.

The object and intention of the Atlanta Medical College, is to offer the best advantages for the pursuit of medical science, and will not be behind in the effort to compete with other Institutions in furnishing facilities for instruction—it is to this mode of competition, that she looks to success, and not to the dishonorable means of detraction and slander.

The announcement containing the details of the proposed *Preparatory* School of Medicine, will shortly be issued. For further information application may be made to the Dean of the Atlanta Medical College.

## Virginia Medical College.

We have received the catalogue of the Medical College of Virginia, at Richmond, Va., for the Session '57–'58, and the announcement of '58–'59, with a catalogue of all the graduates of the school.

From this catalogue, we learn that they had in attendance at the last course 60 Matriculates, and conferred the degree upon 21 gentlemen, and report 416 as the whole number of graduates. We perceive that this Institution has lengthened its term to five months, commencing the 4th of October, and closing the 1st of March.

It has always seemed to us that Richmond was one of the very best points for a successful Medical School.

From the facilities offered by the Medical College of Virginia, we would desire to commend it to the attention of those who wish to obtain a complete medical education in a Southern city.

Richmond not only furnishes every necessary facility for Medical Instruction, but as a place of residence, is unquestionably the most desirable city in the United States, and the student will find there a most agreeable place of sojourn.

☞ We have received the following Circular, which we take pleasure in inserting, and at the same time, in expressing our cordial good will towards the movement, and desire for its eminent success.

We are in favor of the largest liberty, and the most full and free offering of medical advantages throughout the country, and should the plan be adopted, of which we have been an advocate for a length of time, and a recommendation of which is contained in the late report upon Medical Education to the American Medical Association, viz: *The separation of the Teaching and Diploma-granting power*, every vestige of objection to the multiplication of Medical Schools, will have been removed. All we desire for ourselves, is a fair field, and to be judged by our *merits*, and this we are more than willing to grant to others.

## Shelby Medical College,
### Nashville, Tenn.

### FIRST ANNUAL COURSE OF LECTURES.

The preliminary course of Lectures in this Institution will commence on the first Monday in October, 1858, and extend through the month. It is advisable that Students, who contemplate attending through the winter, should commence with the Preliminary Lectures.

The Regular Course will open on Monday, the first day of November, 1858, and continue to the 1st of March ensuing, and will comprise full lectures on

General and Microscopical Anatomy;
Physiology and Pathology;
Chemistry and Pharmacy;
Materia Medica and Therapeutics;
Theory and Practice of Medicine;
Obstetrics, and diseases of Women and Children, and
Principles and Operations of Surgery.

*Surgical and Medical Clinics* will be given twice weekly, and will constitute an important feature in the course of instruction.

The new and commodious College Buildings, with Hospital attached, are located on the corner of Broad and Vine streets.

The Anatomical Rooms, under the direction of the Professor of Anatomy, will be opened on the first Monday in October, and an ample supply of the best material will be afforded through the Winter.

*Regular announcements, with details of the Faculty organization, will be issued in a few weeks.*

For further information address

JOHN P. FORD, M. D.,
*Dean of the Faculty.*

Nashville, Tenn., June 7th, 1858.

## Virginia Medical Journal.

To our friends who are looking out for an addition to their stock of periodical Medical Literature, we would desire to commend in the highest terms, the "Virginia Medical Journal," as being one to which they may always look with confidence, for something new and substantial.

By this allusion, we of course mean no invidious comparison, but not being connected with any Medical School, and relying alone for support upon its merits, we should like to see it, as it deserves, in general circulation throughout the Southern country, to whose medical literature, it is certainly an *honor*. It is published in Richmond, Va., and edited by Drs. McCaw & Otis.

## Books Received.

"Institutes of Medicine, by Martyn Paine, A. M., M. D., L. L. D.," &c.

"Medical & Physiological Commentaries," by the same author, from whom, they have been received.

We have also received "Nature and Art in the cure of Disease," and, "Mind and Matter or Physiological Enquiries," from Messrs. S. S. & W. Wood, New York.

These books will be reviewed for the next number of the Journal.

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# ORIGINAL COMMUNICATIONS.

## ARTICLE I.

*Changeability of Disease.* By Dr. J. W. Dowsing, Atlanta, Ga.

From whatever point of view we survey the vast empire of nature, changeability, or mutation, would seem to be one of the results of her natural laws. So far as we can observe, this principle is common, except in degree, alike to the animate and inanimate, the organic and inorganic, worlds. And when we take an extensive cosmical view, we find that it pervades not only our terrestial globe, but have reason to infer that it attends the celestial bodies, in their revolving migrations, to the remotest borders of the universe. If we regard the earth in its retrospect, we find that its history has been one continued series of successive changes. Each one of her geological systems is a volume, and every stratum a chapter upon the revolutions and transmutations that have taken place in her body. Every era has had its peculiar geological features and aspects; and from the mysterious depths of Paleontology, we glean that each period has had its peculiar plants and animals — gradually rising in the scale of perfection, through the successive periods, from the Graywacke to the Historic—rising in the vegetable kingdom, from the fucoides and flowerless plants of the Graywacke, to the graceful palms and magnolias of the Historic; and in the animal kingdom, from the mollusca, and radiata genera of the former, to the different varieties of man of the latter. Nor do the varied aspects, which the face of the earth every where present, bespeak a less constant change than the history of the past reveals. Two of the elements of ancient philosophers, earth and water, are at constant war with each other, and each contending for the supremacy. At one point the ocean is encroaching upon the land; and at another place, plutonic forces are rearing the land, in the form of islands, above the surface of the great deep. Thus is the aspect of the earth's surface continually changing.

In the vegetable kingdom, this law obtrudes itself forcibly upon us. So susceptible are plants to this principle, that cultivation has the power of so transforming their nature, as to render some of the most uninteresting species of the primeval valleys at once the most beautiful and delightful, as well as the most useful of our gardens and orchards. From the hard and acrid nature of the native apple of the forest, has decended the delicious, mellow, and palatable fruit of cultivated orchards; while the soft and delicious peach has its origin from a shrub, noted for producing one of the most poisonous fruits found in the primeval forests of the East.

If, in the vegetable world, this law is found to prevail, it is still more strikingly developed in the animal. Among the beasts of the field, the birds of the air, or the inhabitants of the waters, it is constantly manifesting itself. At the head of the animal creation comes man,

> "At first the infant
> Mewling and puking in the nurse's arms;
> And then the whining school-boy with his satchel,
> And shining morning face, creeping like a snail,
> Unwillingly to school;" and

the bold and courageous cur of the northern latitudes, becomes the degenerate and hairless animal of Turkey and Nicaragua; while the floundering Porwiggle of to-day becomes the full formed, leaping frog of to-morrow. And who has not observed with mingled emotions of wonder and admiration, the great transformation to which many tribes of insects are subjected? To-day we mark with disgust the loathsome and crawling caterpiller; to-morrow we scrutinize closely the dormant aurelia, only to behold with delight, after a brief period, the gaudy and fluttering butterfly. But wonderful as these changes may seem, they are not more remarkable than the transmutation from life to death. In the dead body, so soon as the vital force, or power of cohesion has taken its flight, all things hasten to unite with each other, according to their particular laws. Combinations which have had a temporary existence, and in which the art of man may detect and separate substances, which he would seek in vain, in the interior of the earth, and in the fluid ocean of air and water, are broken down, and return to their natural elements. Inert matter, says the great modern master of science, Baron Humbolt, "animated awhile by vital force, passes through an innumerable diversity of forms, and perhaps in the same substance which once enshrined the spirit of a Pythagoras, a poor worm may have enjoyed a momentary existence."

It would, indeed, seem that the vital force itself was subject to change, or rather vascillating in the uniformity of its strength. In embryotic animals, and in the germ of plants, it is weak, and consequently is easily destroyed, but gradually becoming stronger, and its powers of assimilation more powerful until it reaches maturity, when it as uniformly grows weaker, and becomes less capable of containing or holding inorganic matter in subjugation; no longer able to assimilate, it yields the substance in which it has temporarily enshrined itself, to the laws of the inorganic world. Seeing, then, that the very elements of man's existence are constantly assuming new forms, and seeking new affinities, we naturally conclude, *a priori*, that the various maladies to which he is subject, would be influenced by the same immutable laws; and that his disorders must, of necessity, present a diversity of features and aspects; and this is in accordance with the history of disease. It would be as great an anomaly in the practice of medicine, to find two cases of disease with symptoms in all respects similar to each other, as it would be in nature to find two human faces, with features entirely identical. In proof of this, we have but to refer to common observation, and the history of the past. That the cold plague, which was once the terror and scourge of the Middle Ages, was a form of Asiatic Cholera, there can be no doubt; and that it was materially different in many of its features, is as certainly true. Nor can there be but little doubt, that the famous pestilence that once scourged proud Athens, and the destructive plague that depopulated London in 1666, were closely allied to the same germ of disease.

But for evidence of the changeability of disease, we need not recur to semimythical annals of ancient history, nor to the less fabulous pages of modern record. We have but to examine and investigate with ordinary accumen, the diseases that fall under our own observation. Our lots are cast in an age, in a country, and under circumstances eminently calculated for the observation of this principle in disease, and it can not have failed to have attracted the attention of the most superficial observer. Besides, the many natural causes, such as constitutional changes of the atmosphere, geological formations and electrical phenomena, which tend to modify and vary the aspect of disease, there are many social conditions, which act as powerful auxiliaries to the promotion of that end. Man is not stationary in his habits, but is ever changing his physical, political and social condition; and as in the progress of time, these changes in the human race must continue to increase and become more complex, in the same ratio will the intricacy of his disorders increase. The pioneers of a new country, provided it be fertile, well watered and climate favorble, pays the penalty of encroaching upon the forest and uncultivated lands, by suffering frequent attacks of autumnal, intermittent and remittent fevers; while the inhabitants of old and cultivated countries suffer from gout, neuralgia, mania, consumption and scrofula. He that has yielded, in any considerable degree, to the migratory character of our people, cannot fail to have noticed the gradual change of disease, in our newly settled States. First comes autumnal, intermittent and remittent fevers—from the mildest form of intermittent to its most malignant grade. As the country becomes older and more settled, these diseases gradually give way, presenting in the mean time, every phase of their respective types, until they are finally supplanted by dysenteries and continued fevers. Even in my native State, (Mississippi,) which is comparatively a young State, districts in which but a few years since, no type of fever was known, save intermittents and remittants, are now superseded by these diseases. Or, if, indeed, a case of the old fashioned autumnal, or remittent fever occur, it requires the greatest caution, and closest vigilance in the treatment, to prevent it from running into the continued type. Our endemical diseases will, in time, leave our country, and will perhaps, be known to posterity only in history. Already the most formidable of the group has, in a manner disappeared, and but for the faithful and accurate history given of it by one of our worthy brothers, would, in all probability, have been known to future generations, only through the tradition of their ancesters.

It must be admitted that there has been of late years, a natural tendency in most of our diseases to assume a typhoid action; yet the past two has been more exempt than the preceding ten. How far this condition is dependent upon natural causes, such as meteorological changes, cultivation, &c., and how far upon injudicious treatment, remains for future experience and observation to determine. That there are many cases of artificial typhoid, brought about by injudicious treatment, chiefly by the excessive use of purgatives, I have no doubt. There is too much indiscriminate purging in the treatment of our fevers. It is true that many diseases require purgatives, and many others tolerate them, without rapid prostration; but as a general thing, they are more abused in domestic practice, and I am sorry to admit, by some practitioners, than any other class of medicines in the whole materia medica.

Periods may occur in which most diseases bear the use of purgatives with impunity; but this does not argue their indiscriminate use. The dogma of Hamilton and Cooke had its origin in one of these periods; but it has been persevered in by their disciples and followers, without regard to the constitutional changes of disease, to a fearful and mischievous extent. Many of them regard the liver as *the* offending organ in almost every malady, and according to their favorite doctrine, commence torturing it with blue mass, Cook's pills, calomel, and in fact the various purgatives of mercury, and continue it for an incredible length of time. Some physicians of this school seem to consider their patients Promethian-livered; and as Jupiter bound Prometheus of old with chains, and sent an eagle to prey on his liver, which grew every night as much as it had lost in the day, so these modern Jupiters, in medicine, confine their patient, and send a vulture, in the form of mercury, to prey on their livers at night. The chief difference in the comparison arises in the liver of Prometheus being inconsumable, while that of the modern patient is highly vulnerable.

Mortifying as may be the acknowledgment, I am forced to admit, that I have seen physicians, who stood high in the profession in the community, prescribe a dose of mercury almost every night, for weeks in succession, when nothing in their condition required its administration. How, then, can we expect otherwise, than that this valuable agent should fall into disrepute with the community, and become at once the *opprobium medicorum,* when the community see, daily, its deleterious effects from such rash empiricism? But let me not be understood as being in any way opposed to the judicious use of this valuable medical agent. Nothing is farther from my purpose, than to attempt, in any degree, to disparage it as a remedy. It is only to its abuse, its too common administration, which has brought it into such odium with the community, as to render it difficult of administration, without disguising it, that I object. So much opposed are many persons to using it, even when their condition requires it, that the practitioner is sometimes tempted to resort to the most artful stratagems in order to induce them to take it. That this state of affairs has been brought about by its too common and indiscriminate use, there can be no doubt.

It is, then, an axiom in medicine, that diseases are not only constantly assuming new features and aspects, but, also, new forms and types. In our intermittent, remittent, and continued fevers, the changeability of disease is strikingly manifested; since they are continually alternating in type, and running into each other. Intermittents frequently run into remittents, and sometimes *vice versa;* and often has the practitioner seen, both to his regret and chagrin, remittents assume the continued variety, in despite of, seemingly, the most skillful treatment.

In some of our low Southern States, bordering upon the Atlantic and Gulf coast, especially in Louisiana, about New Orleans, the summer and autumnal diseases have a decided tendency to crisis by hemorrhage; and according to Dr. Fenner, this crisis makes yellow fever; since "it forms the true characteristic difference between the high degrees of summer and autumnal fevers in the city and country, and must depend on locality and attendant circumstances. During the healthiest years it predominates over all other types; but during the sicklier years, in the country it runs into remittent, bilious and congestive; whilst in the city it runs into yellow fever. Dr. Harrison testifies, that he has often observed malignant intermittents to precede the outbreak of yellow fever."

In autumnal diseases, I have occasionally been not a little puzzled in making out a diagnosis—the symptoms so obscurely marked, and so blended with each other, that it has been difficult to decide whether the case before me was one of bilious, intermittent, or remittent; and I have sometimes been not a little mortified to find that it was neither, but a genuine specimen of continued fever. Of this difficulty of diagnosis, Dr. Fenner remarks with peculiar force: "Physicians may say what they please about being able to distinguish a case of yellow fever as soon as they examine it; we do not believe it possible, according to their ideas. Rarely does a summer pass, in which we do not hear of some intelligent and experienced practitioner being perfectly astonished at seeing what he had pronounced a case of intermittent, or remittent bilious fever, terminate in black vomit or other hemorrhage."

But, thanks to a bountiful Providence, it matters little what phases our febrile diseases may wear, or what types they may assume, we have a remedy with which, as a general thing, we do not fear to meet them, even though they present as many forms and shapes as Proteus himself. The sulphate of quinine, as a remedy in fevers, whether billious, intermittent, remittent or continued, has never been too much valued, nor too highly extolled. The sedative powers of large doses of quinine in fevers, were first proclaimed to the profession by Dr. Fenner, and have been subsequently endorsed by the army surgeons, and the physicians of the southern and western States, who have constantly urged its claims as a sedative, in the various Medical Journals in the United States, for the last fifteen or twenty years. These views are gradually extending to the north, and when properly and impartially tested there, must certainly produce a revolution in therapeutics. Dr. Fenner is a sanguine advocate of large doses of quinine in yellow fever, and urges the excellence of the abortive treatment, of that disease, with the utmost confidence. Dr. Dundas, of Liverpool, recommended the same treatment in the continued fevers of England. The wonderful powers of sulphate of quinine are forcibly set forth in a short essay, by the lamented Prof. Harrison, of New Orleans, in the second volume of the New Orleans Medical and Surgical Journal, and subsequently by several other eminent practitioners of the same city. In the continued fever of certain localities in Alabama and Mississippi, previous to an epidemic which prevailed during the autumn of 1854, and spring and summer of 1855, my experience and testimony is in behalf of quinine, as a most powerful remedial agent. When given in large doses, say ten or twelve grains, every two or three hours, and continued until thirty or forty grains are taken, it seldom fails to be followed by the happiest results. I know that there are those who entertain a contrary opinion, but, as yet, I have never known any injury to result from prescribing it, in however large doses, or however long continued; but in the great majority of instances, a marked amelioration of all the febrile symptoms has immediately followed its administration. And even in those cases in which the febrile symptoms were not abated, the patient was subject to no inconvenience, save, perhaps, some unpleasant ringing in the ears, and a slight temporary derangement of the head. It is true, by the use of this remedy, there is some pecuniary loss, which should not be disregarded, particularly if the patient is poor; but when we use quinine efficiently, in any form of idiopathic fever, both the physician and patient have the consolation to know that they have tried one of the most reliable and efficacious febrifuges known to the medical world. I would not be understood as assuming the ground that quinine is capable of arresting all cases of typhoid fever; on the other hand, I believe it is not. In many instances I have administered full doses, in which it seemed to exert no controlling influence. But in the majority of these cases, the disease was remarkably insiduous in its approach—the patient often being indisposed with slight head-ache and fevers, for a week or more before I was consulted. Had full doses of the medicine been given at the very out-set of the disease, the result would, perhaps, have been different, but as it was, the weight of evidence was against its use. And if I had never seen the happy effects of quinine, in typhoid fever, in other seasons, localities and climates, I should have been disposed to condemn it, as a remedy in this form of fever. But its failure served only to impress me with the great medical truth, that disease, viewed from different points, presents new aspects, and requires new modes of treatment. Many a Medical Knight has shivered his lance against the shield of his antagonist, when, perhaps, an interchange of position would have convinced each other, that both were right and both were wrong. And had some of our talented physicians in Atlanta practiced medicine in New Orleans, and Dr. Fenner in Atlanta, they might, perhaps, approximate each others views on the points, more closely than they do at present.

In the Panama fever, which I should consider nothing more nor less than a continued form of remittent fever of the tropics, full doses of quinine, it is asserted, usually either cuts short the disease, or prevents the accession or increase of the more formidable symptoms. Indeed, a friend of mine, who remained some time in Panama, says, that "quinine, given in full doses in the incipient stage of the disorder, in good constitutions, seems to act as a specific, and at once frees the patient from all symptoms of fever.

Such constitutions, or conditions of the atmosphere as produce influenza, measles, scarlatina, whooping-cough, cholera, dengue, and other wide spread maladies, which occasionally visit us, undoubtedly have a decided modifying influence over endemic and sporadic diseases. The prevalence of our fevers, dysenteries, etc., is frequently promoted, and modified in their nature, by what may be termed a pestilential or abnormal condition of the atmosphere. When the spread of these complaints is extensive, and their malignancy and devastation usually formidable, I apprehend that they are always thus promoted—their peculiar poison being aided in its action by some malign condition of the atmosphere.

These changes, or constitutions, of the atmosphere come and recede, and have appeared and disappeared, ever since the earliest authentic record of our race, without revealing to mortal eye, even their existence, except through their effect on health and vitality. An opinion on them could, therefore, be purely conjectural; consequently, I will not offer one, but leave their disclosure to the observing, intelligent and faithful students of nature, and the sage teaching of time.

But novel as the idea may be deemed, I believe there are irregular periodic constitutions of the atmosphere, in which the *vis conservatrix naturæ* and healthful action of the economy is depressed, and a general tendency prevails in the system, to take on disease of a malign or depressing character; so, also, there are periods which the converse is true, and diseases of a highly inflammatory type prevail. These periods are not regular in their appearance, but like comets, appear and disappear at uncertain and irregular intervals. Sometime, for a series of years, pleurisy, pneumonia, phrenitis, inflammatory rheumatism, and other diseases of a high inflammatory type, seem mostly to prevail, which require and bear depletion and contra-stimulants to their fullest extent. But, perhaps, in a brief space of time, these conditions of things are changed. The maladies which existed in the same locality, a short time since, have altered these types; and now, instead of bearing depletives, their use must be sedulously avoided; while carminatives, anodynes and stimulants, must be early and energetically administered in their place.

Nor can there be any reasonable doubt, that this *changeability* in disease, is the prime and efficient cause of the origination of the various dogmas and systems of medicines, which have at different times been thrust upon a credulous world. It is well known that Thompson projected his ultra stimulant theory at a time when spotted or continued fever raged in his vicinity to an alarming extent. Being a low grade of fever, it required stimulants from the outset. Luckily he fell upon the practice of administering his favorite hobby, lobelia, and the various preparations of pepper, with the happiest success, while his cotemporaries pursued their accustomed practice of purging and depletion, with the worst consequences. Inflated with temporary success, he at once imagined that he had found in these few agents the universal remedy for the cure of all diseases, and consequently proclaimed his favorite theory to an all credulous and ever confiding world. The result is known to all. But in a few short years the condition of things were again changed. In the same locality, in which a short time previously he was hailed with so much applause, the continued fevers had disappeared, and were replaced by pleurisies, and other diseases of a highly inflammatory type. He again resorted to his favorite remedies; but now his treatment was as fatal, as it was successful before. On the other hand, the regular physicians treated the diseases on general antiphlogistic principles with marked success. The consequence was, that his theory immediately exploded, and he himself fell into disrepute, in the sphere of his own immediate influence. His opinions were no longer respected at home, but he had already propagated his doctrine to the world, which is scarcely yet fully dissipated; for, as Jefferson once quaintly remarked, "error will travel a thousand miles before truth can get his boots on." But truth will soon be round, and the doctrines of Thompsonianism will, ere long, be known only as one of the novel absurdities of the past. Yet it should teach our profession the wholesome lesson, that we should ever keep a vigilant watch on the changes of disease; discriminate in the treatment of maladies; and cease to persevere in the use of a given class of remedies, simply for the sake of theory. The "science of medicine is a great unroofed temple," and much yet remains to be accomplished. Let us, then, not discard a valuable suggestion, or a good remedy, because it comes recommended by an objectionable system, since it is the duty of every judicious physician to select from all systems that which may prove valuable or useful.

Homœopathy is another beautiful system of refined nonsense, which must run its course—rise, flourish, decline, and ultimately be consigned to the tomb of oblivion, like its antetypes, the abracadabra and royal touch. But from it we may be taught several important lessons. It demonstrates to us in a striking manner, the credulity of mankind. The generality of man wonder and marvel at a matter, in proportion as they are ignorant of its laws; and the more astounding and unreasonable the dogma of the designing imposter, the more prompt are they to believe, and bow in low humility to his shrine. Only a few practical hits, no matter how grossly misrepresented, are all that are necessary to give circulation to the vainest chimera that ever emenated from the imagination of the most fanatical visionary. It is vain to expostulate with them about the impropriety of fostering such nonsense. They virtually tell us that all our ratiocinations must be reversed, and the infinitesimal fraction of an atom must be regarded as possessing more power than the whole. If the preposterous system of Hahneman be true, the boasted philosophy of Bacon, Newton, Franklin, and a number of other luminaries of the scientific constellation, must be regarded as dreamy visions, which have been unjustly considered philosophy by an ignorant and benighted world. More than fifty, yea, sixty, years have elapsed since the doctrine of Homœopathy was promulgated. It has subsequently been pronounced to be utterly false and unworthy of confidence, after having been thoroughly tested by some of the best physicians of the age.

M. Andral, one of the first practical observers in medicine that Europe has ever produced, declares that he experimented on several individuals in *health*, with belladona, cinchona, aconite, &c., and in no single instance have the promises of Homœopathy been verified. This distinguished physician has also tested the merit of this system upon more than one hundred cases of *sick*, and though he made these trials with such boasted articles as aconite, conchona, belladonna, etc., he could not perceive that they produced any effect. Yet Andral procured his medicines from a Homœopathic pharmaceutist, and scrupulously observed the special regimen, such as the great father of the system orders.

Few enlightened and honorable physicians of the present day, have been proselyted to this new doctrine. Prof. Henderson, of Edenburg, the most prominent one, was expelled several years since, with disgrace, from the medical society of that city, in consequence of it; and observation proves, that it has been seldom adopted, either in Europe or in this country, except by men of inferior standing, and who could only get into practice by the aid of *novelties*, not to say duplicity and humbuggery. A writer in the New Orleans Medical and Surgical Journal justly remarked: "It is gravely charged upon such as have left the regular profession to follow this new light, that they practice the grossest imposition upon their employers by availing themselves of whatever popularity may attach to the new system, while they pursue mainly the old. Such conduct merits, and must, sooner or later, obtain the scorn and contempt of all honorable men."

But homeopathy, after all, may ultimately result favorably to the cause of science. Besides convinçing man of the credulity of his race; the duplicity and transcendental pretensions of its author and his followers; the ridiculous absurdities of its theory; and the inert efficacy of its practice, it further teaches us the important truth, that the great majority of the complaints of mankind do not necessarily endanger life, and may get well under almost any plan of treatment; or, if you will, without any course of treatment at all. It will be seen, then, that the chief secret and beauty of the system is a reliance on the *vis medicatrix naturæ.* This is the chief oasis in their desert system; and it would be well, perhaps, for us to profit more generally from it.

In more than one instance have I known patients to be pronounced hopeless, and left to die, recover by virtue of this mysterious principle of our nature. But this principle is not always adequate to the emergency, and it remains for the judicious physician to decide when to aid the natural healing and conservative powers of nature by medicinal agents, and when to desist in their use.

Next comes the late system of Hydropathy, with its long train of amphibia, alternately swathed in wet sheets, and sweating to discharge the *peccant humors* from the blood through the skin. That these aquatic followers of Prietsnitz can and have treated, efficiently, many diseases by the application of water, I do not pretend to question; but I am not yet prepared to admit that water is the universal panacea for all diseases. But there is nothing new in the treatment of diseases by the local application of water. It has been used as a remedial agent in medicine, ever since the day of the Epidausian god; and every judicious physician will continue to use it whenever symptoms arise that indicate its employment. But to use it indiscriminately, and attempt to treat all disorders with it, is as utopian in theory, as it is rash and empirical in practice.

We have already stated on a previous page, that changeability of disease was probably the chief cause of the existence of the various dogmas and systems in medicine. There has ever been a veil of mystery thrown around the temple of medicine, and whatever is wonderful in theory, or novel in practice, has always been eagerly grasped by the credulous and ignorant. From unseen natural causes, changes in social condition, &c., diseases are constantly assuming new forms and types, and the remedies which proved efficient in the diseases of yesterday, may prove futile and nugatory in those of tomorrow. This naturally begets doubt and distrust in the minds of the masses, and they are at once ready to hail, with enthusiasm, anything in the shape of medicine, or doctrine, that bears with it the impress of mystery and novelty. The unprincipled and designing imposter, seeing this state of things, and conscious of the unbounded credulity of mankind, prepares some worthless secret nostrum, or proclaims a *theory*, nor cares what may be the result, so that his purse is well lined with gold. Or the wild visionary, blinded with infatuation, may promulgate a doctrine impelled by the frenzied belief that he would thereby ameliorate the condition of man, and cause his name to be emblazoned to a grateful world as a benefactor of his race. Thus it will be seen, that he may be criminal in the matter, and deserve obloquy; or *innocent*, and merit the commiseration of his fellows.

Besides the meteorological changes, habits of life, food, regimen, geological position, etc., will form other important modifying causes in the peculiarities of disease. As our country grows older, and becomes more densely populated, the luxury of life will continue to increase, and the habits of the people become more artificial and complicated. From these causes disease will continue to change. Remittent and intermittent fevers, which are now so common, will diminish in frequency, and fevers of an irritative character will prevail, and ultimately take their place. And these irritative or continued fevers will be greatly modified in their nature and as pect, by constitutional and hereditary diseases; for the presumption is, that the latter will continue to increase. It is true, that some may, possibly, by the aid of medical science, be eradicated, but the probability is, that the great majority of them will occur more frequently, and become more complicated and difficult to manage, as time progresses.

Diseases of a tuburculous and scrofulous character will continue to be the scourges of our race, and will increase in virulence, as they are transmitted from one generation to another. And as we descend the great stream of life, they will undoubtedly prevail as much as now, and will, in all probability, assume new forms, which, if seen now, would be strange and anomalous. With each successive generation we may look for an increased proportion of those who have a tuburculous or scrofulous taint. In future ages, when large cities shall have sprung up in our now sparcely settled country, with a crowded population, filthy and ill-fed inhabitants, and ill-ventilated residences, the increase of cachectic diseases will be greatly favored; and as these conditions continue to multiply, diseases of a scrofulous character will be found to abound in almost every form.

The syphylitic will continue to increase, and in its remote effects, as transmitted from parent to child, it may become so common as to be interwoven with almost every form of morbid derangement, and thus become a prolific source of chronic disease. "The older a people becomes," says Dr. Burr, of New York, "the more syphylitic complications will be found." Generations yet to come will have to pay the penalty of their father's transgressions in the form of many kinds of anomalous diseases. "To a certain extent we may, at the present time, see some of the consequences of syphylitic taint; and when chronic derangements presented themselves in a form inexplicable and strange, my suspicions would not be excited, and I should search for evidences of venerial contamination, either in the patient before me, or in some of his immediate ancestors. The cause of these complications cannot, in all probability, be ckecked, but will continue to multiply until the consequence will form no inconsiderable portion of the future chronic diseases of this people."—Burr.

The neurosis will also become more common. Lunacy, and mental affections generally, will become a prominent disease. The character of our Government, morals and politics, will operate as so many causes to increase the number of cases of mental derangement among the people, and will also tend to give new forms, varieties and phases, to their manifestations.

Gout and other diseases, connected with personal habits, practices and pursuits, though minor in themselves, will continue to increase, and will exercise an important modifying influence over other forms of diseases. Goitre and cretinism, in some localities, will become common, and will no doubt, in the course of time, give such a variety of type to other diseases in their locality, as to require some peculiarity of treatment.

I have already assumed the ground that changeability is not only found in disease, but is one of the natural results of the laws of the universe. Man himself is constantly changing; as a natural consequence the disorders to which he is subject must necessarily assume new forms and aspects. At certain periods of life, one temperament passes into another, as the result of the natural changes which take place in the process of the growth of the human body. This subject is so interesting, that it presents a theme for an extended paper, which cannot be entered upon here.

Like every thing else in nature, the diseases of mankind are never stationary. Of the system of man, the same is true. From birth to death it presents an uninterrupted succession of changes; and death itself is but another change. Nor are the mutations of disease less strikingly manifested.

Such, in brief, are some of the views I have entertained respecting the *changeability of disease*, and the causes that diversify it. If they are correct, time will ratify them, and further observation fill up the outline I have so imperfectly sketched. In that case, like all other truths, they may prove useful. They do not rest on visionary conceit, but have a tangible basis that can be approached and examined. But should they be found erroneous, they will only share the fate of the thousand perishable fancies that have preceded them, and no one will regret their subversion less than myself.

## ARTICLE II.

*Difficulties of Diagnosis.* By Dr. R. J. PERRY, Vienna, Ala.

*Mess. Editors of the Atlanta Med. & Surg. Journal*—

I observed in the last number of your Journal, (April No., 1858,) a very interesting article, from one of your contributors, upon "The Difficulties of Diagnosis in Pneumonia;" and to my mind, he proves, conclusively, that even in the absence of several of the most prominent symptoms that are considered as indicative of this disease, it is often really found to exist. My mind was strongly impressed by this statement, and I have long been well convinced, that practitioners are too apt, in attempting an exhibition of their superior skill by hastily pronouncing what a disease is, or what it is not, to commit the most serious blunders. How often is it the case that we are told that Doctor A. or B. is attending a large number of patients who are laboring under some serious disease, when a thorough investigation of their condition proves that such is not the fact, thus jeopardizing their professional skill, or character as gentlemen, or, perhaps, both. I am, however, disposed to believe that such errors should be attributed mainly to haste and carelessness, rather than to the want of skill or evil design on the part of physicians. Again, there is another habit too common with practitioners, and that is pronouncing in the presence of their patients the name of the disease with which they are afflicted; and more especially so, if that name is likely to excite or alarm them.

In reviewing my *Note Book*, of important cases, my attention has been called to one, the diagnosis of which perplexed me much, and as it is interesting in other respects, I am disposed briefly to report it to the profession.

I was called on the night of the 23d of November, 1856, to see Mr. T———, a ferryman, of Vienna, aged 26 years, and found him complaining of pain in the left side, and saying that he could not get a *long breath*—had had a chill the previous night; pulse 110; some headache; and was expectorating a dark colored or brownish sputa. On applying my ear to the left side of the thorax, and over the seat of the pain, I either heard, or imagined I heard, the sound common to the incipient stage of pulmonic inflammation—minute crepitation—and pronounced his disease to be pneumonitis, and treated him accordingly. In three or four days he was able to set up, and appeared to be convalescent. On the 30th day of the same month, I left home, to be absent for a few days, and on the night of that day, the same symptoms as were present at the outset of the attack, returned, and Doctor P. was called to see him. He also considered the disease to be pneumonia, and of course prescribed accordingly. Again, in a few days he began to improve, and by the 12th of December was able to walk about town. That night, and for the third time, he was again seized with similar symptoms as at first, except that he only complained of pain in the side while coughing, and was inclined to sleep almost incessantly. The same kind of bloody or rust colored sputa was discharged; tongue furred, with red tip and edges; pulse 120; and complained of being unable to use his arms freely, or to turn over in bed; skin dry and rough; eyes dull and watery. Tenderness and dull pain in the left lumbar region. I now suspected the existence of an abscess in the left lung; cupped and blistered the left side; and administered, successively, calomel and Dover's powder, antimony, veratrum, &c.

*On the* 13*th.*—Symptoms the same; no action from the calomel; pulse 120; ordered oil at night.

14*th.*—Symptoms the same; ordered antimony in larger proportions than before.

15*th.*—Bowels freely moved last night; pulse 110; continued the veratrum.

16*th.*—Patient worse; severe pain in the left arm, and a red streak along the course of the brachial artery.

17*th.*—Cough not so troublesome; respiration improved; pulse 100; bowels moved twice during the previous night; drew 8 ozs. of blood; directed an emollient poultice to be applied to the arm; and ordered ¼th of a grain of morphine, with 2 grains of calomel, every three hours; and continued the veratrum.

18*th.*—Symptoms worse; pain in both arms; had slept none through the night; tongue still coated; pulse the same; pain in the region of the heart. Gave half a grain of morphine, and requested a consultation with Doctor M., of Fairfield, who, upon receiving a history of the case, hesitated whether to consider the disease pneumonia or dengue. He suggested Lugol's solution of iodine, and the 1-12th of a grain of strychnine every six hours, and a sufficiency of opium to quiet the patient.

19*th*, 20*th*, 21*st.*—Symptoms nearly the same, except when under the influence of potent anodynes.

From this time until the 30th of the month, there was a gradual but slight abatement of the symptoms. Tongue pretty well cleaned off; pulse 90; pains shifting from one extremity to another, and then to the head, neck, trunk, &c. Nor will I further protract an account of the varied and numerous symptoms that, from time to time, presented themselves; nor detail the diversified treatment employed by myself and others; suffice it to say, that he was finally reduced to the condition of almost a living skeleton, and was for sometime unable to move either his hands or feet.

With some slight degree of improvement in general, he reached the 13th of February, 1857, when, during a violent fit of coughing, a greenish looking pus or matter, of a very bitter taste, began to discharge copiously from the mouth, evidently the result of a ruptured abscess. The quantity discharged was enormous, and continued to escape for weeks. The pains, and other unpleasant symptoms, gradually subsided under appropriate treatment. He, by slow degrees, gained his strength and health, and is now as well as before he was attacked.

I should have mentioned, that prior to his first illness, he had been subject to occasional chills, and was predisposed to anasarca, and some cough. Efforts had been made to produce ptyalism, but they were unsuccessful. The questions at issue are, was the abscess a cause or consequence of the pneumonic, hepatic and hydropic disturbances, separate or combined, and was it hepatic or pulmonic. That the primary lesion was in the liver, I am strongly inclined to believe. If so, it is obvious that we were essentially mistaken in our diagnosis;* and now in conclusion, allow me to remark, that the object of this communication is mainly to awaken the profession, and more especially the junior members of it, to the importance of "Difficulty in Diagnosis."

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* While writing this report, Mr. T. informs me that from the time he commenced *swelling up*, some six weeks prior to my first being called in to prescribe for him, he had a dull aching or uneasiness in his left side, which became painful and swollen, and remained so until the time of my first visit.

## ARTICLE III.

*Asclepias Incarnata in Gonorrhœa and Syphilis.* By WM. HAUSER, M. D., of Spier's Turn-Out, Ga.

Perhaps no country beneath the sun is so rich in valuable medicinal plants, as these same United States of ours; and in no part of these is the indigenous flora, so varied, beautiful, and useful, as in the Southern States. Here, at our very doors, from the Potomac to the Rio Grande, are found, in endless profusion, anodyne, cathartic, emetic, diuretic, diaphoretic, tonic, and alterative plants, &c., &c.; but a guilty apathy prevails among us about developing our own resources, and we prefer to import across long wastes of ocean, and from our enemies, at heavy cost, drugs far less valuable than those we might find at home, if we would only leave off wasting our time in hunting, fishing, &c., and engage with becoming industry and perseverence in the business of our profession. To do a little of my own duty in the premises, I offer this paper.

Six kinds of Asclepias are mentioned in Wood & Bache's Dispensatory, ed. of 1851, viz: Incarnata, Syriaca, Tuberosa, a Curassavica, Gigantea, and Vincetoxicum. Five of these appear to have been used, at different times, in the treatment of urinary and genital diseases. With the first only, I propose to deal in this article. And I will say, in passing, that I have never yet talked with a physician who professed to have any knowledge either of the physical or therapeutical properties of the plant in question. Every one could talk handsomely of successes in treating gonorrhœa, if not syphilis, in its different stages; and so, doubtless, they will continue to do, while Balsam Copaiba, Tr. Cubebs, Dulc Sp. Nitr., &c., maintain their potency; but cases constantly arise that are dreadfully perplexing, even to the best and most experienced physicians, and then it is that a groaning comes on for an enlargement of the domain of medical knowledge.

The physical properties of this plant being sufficiently described in the Dispensatory, no mention of them is necessary here. But very little—almost nothing—is said in that book, to which every young Doctor inevitably looks for information, about medical substances, concerning the therapeutic properties of it. I have found it, not only alterative, diaphoretic, and diuretic, but one of the finest aperients in the Materia Medica. Though this article was meant for a monograph, it is deemed best to state at this point, that I have used it with the happiest results in many forms of fever, but chiefly as an adjuvant to other medicines.

For the treatment of gonorrhœa and syphilis, I doubt if there is any thing equal to it now known to the medical fraternity. The root only is used, and the medical properties of that reside in the cortex. I have used, for many years, the tincture only, prepared in diluted alcohol, on account of the gum with which the root abounds.

℞ Asclep. Incar, ℥iv.
Diluted Alcohol, Oji.

After about 14 days' maceration, as with most drugs, it is prepared for use. I have generally prescribed it in a tablespoonfull: dose three times a day; i. e., before breakfast, dinner and supper. And this I have done, with very little regard to the stage of the disease, both in gonorrhœa and syphilis, however heterodox and unscientific it may appear to those nice critics in the medical fraternity who can theorize learnedly, but fail in practice.

### CASES—GONORRHŒA.

*Case 1st.*—J. T., aet. 24, was afflicted with "*running of the reins,*" (strange that all have this, and none of them venereal,) "*brought on by a strain;*" and it had afflicted him long and sorely, even to the extent of a change from white to greenish discharges. I put him on tr. of asclep. incarn. alone. But as his business required him to ride a great deal on horse-back, thus keeping up the irritation in the genital region, I think it was two weeks before I succeeded in curing him.

*Case 2d.*—R. F., aet. 28, of intemperate habits, as well as priaputic. He had the candor to say, laughing, "I dont care if you do know what ails me." A pretty wise conclusion in one calling on a Doctor to cure him of disease. A single bottle of ℥vjii, (if my memory be correct as to the size of the bottle) cured him.

*Case 3d.*—J. A. P., aet. 30, like Don Juan, had received a donation "from general subscription of the ladies." His business required daily riding on horse-back, but the Tr. Asclep. cured him, I think he said, in three days.

I deem it unnecessary to report any other cases of gonorrhœa successfully treated with this article, although they have accumulated satisfactorily in a series of years, *as civilization*, (as I tell the boys,) has advanced.

## SYPHILIS.

B. N. had been looking the picture of the wo-begone and despairing for two or three months, seemingly afraid to call for help. Impelled by a feeling of pity, I at last urged him to call on some physician without delay. He placed himself under my treatment. I put him on my favorite Tr.—blistered over his mammary glands several times during the course, and had large quantities of mercurial ointment rubbed into them, after each removal of the cuticle. After two or three weeks' perseverance, I had the unspeakable happiness to see my patient restored to hope and to health. Despair fled from his soul, and that horrid, disgusting sallowness from his skin, and the bloom of the rose came back to his cheeks. This occurred in 1854, and my friend still lives and flourishes as though that "incurable" disease had never afflicted him.

Of the German plan of Syphilization, just now attracting attention, well may Dr. Jas. Bryan exclaim, "let any one imagine three hundred chancres produced for the cure of one!" If physicians will lay aside all indifference, and use the Asclepias Incarnata, especially in Gonorrhœa and Syphilis, I have no shadow of doubt that it will soon take rank in their estimation, with the very foremost remedies in our Materia Medica.

## ARTICLE IV.

### *Items from the Case-Book of* J. Y. WYNNE, M. D., of Good Hope, Miss.

In the report of the following cases, the only object in view is the mutual interchange of opinions and modes of practice, which such reports promote.

The reports in Medical Journals of cases which terminate fatally, as well as those in which we are successful, whether the cases are of rare occurrence or not, or whether they are of very great importance from any other consideration, are read with interest by those who have constantly such cases under treatment.

It is to aid, as much as in my power, in keeping up this very useful interchange of thoughts and practice among the members of our whole profession.

*Case* 1*st.*—A dislocation of the shoulder, of one month's standing, in the person of J. W. B., Esq., came under the treatment of myself and partner, Dr. B. P. Funchess, about the 20th of February. The displacement of the humerus was forward—the head of the bone forming a distinct protuberance just below the clavicle. The luxation occurred in the fall from a horse, doubtless from the weight of the body being received upon the arm while extended toward the back.

The reduction was undertaken, not without some misgivings as to the probabilities of success, and even as to the safety of the operation, after so long a time had elapsed from the receipt of the injury. The patient being brought under complete anasthæsia, by chloroform, and the body fixed by a sheet passed under the arm, traction for not more than five minutes, was sufficient to enable me to restore the head of the bone to its natural position. Some pain succeeded the return of consciousness, but was promptly allayed by morphia. No untoward symptom occurred, and Mr. B. rapidly recovered the use of his arm, which is now as perfect as before the accident.

*Case 2d.*—Jack, a negro man, aged about 30, the property of Mr. H., who, four weeks previously, had been severely hurt by machinery, was placed under my care.

I found him with the following symptoms:—Pulse 120, tongue furred, &c. The injury was received in the pelvis and neighboring bones. I found the toes of one foot turned inwards, the thigh flexed at right angles with the body, with a depression, and no doubt fracture of the pubes. On extending the leg it was ascertained to be three inches shorter than the sound limb. On examination, the femur was found dislocated, upwards and outwards, the head of the bone resting against the dorsum of the ilium. The reduction was undertaken on the 28th of March last, in the usual way, by securing the pelvis by means of a sheet passed over the perineum, and fastened to the wall. Pretty forcible traction upon the injured limb, most of the time for an hour and a half, was necessary to overcome the muscular contraction sufficiently to restore the head of the bone to its proper position.

The patient has so far recovered as to be able to walk, and will, in all probability, regain his usual strength and activity.

*Case 3d.*—Caroline, a colored woman, 35 years of age, the mother of six children, was taken in labor February 10th, at night. The os uteri, which was but slightly dilated, after three hours of considerable uterine contraction, was found rapidly dilating in half an hour after the application of hyoscyamus.

The case proved to be one of twins, with a feet and head presentation, as usual, but in this case the footling first came down and was delivered, the funis, which was of extraordinary length, (five feet) first presenting in advance of the feet. The other child, which was soon after delivered, presented the same anomaly in respect to the length of the cord.

*Case 4th.*—On 23d of April was called, in consultation with Dr. Funchess, to see Chloe, a negro woman, 33 years old, in labor with twins, and received from the Doctor the following statement of the progress of the case previous to my arrival:

Labor commenced early on the night of 22d. The pains, which were at first active, became feeble, and of short duration, when considerable hemorrhage came on. Repeated small doses of Ergot to restore the uterine contractions, arrested the discharge, and the labor progressed favorably to the delivery of one fœtus this morning at 8 o'clock.

The immediate descent and delivery of the second child was, perhaps, prevented by the position of the left arm interfering with the engagement of the head in the pelvis.

In this condition of things, profuse hemorrhage re-occured with convulsions, and consultation demanded.

The last named condition of the uterus, and progress of the labor existed when I arrived. The use of chloroform promptly arrested the convulsions; and in order to deliver the woman more certainly from the danger of protracted labor under existing circumstances, the delivery was hastened by the use of forceps. Both children and the mother finally did very well.

# SELECTIONS.

## *Tubercular Phthisis; the Result of Imperfect Cell Action.* By R. E. HAUGHTON, M. D., Richmond, Ind.

In entering upon a review of the treatment which has been proposed in consumption, and before offering my own views of treatment, I remark, first, that I regard consumption as a curable disease, and for proof would refer to the pages of medicine and to the evidence of its ablest writers in the Old World, as well as the New, such as Laennec, Louis and Andral in France; to Ried, Murray, Mills, Scudamore, Coregan, Flood, Forbes, Hastings, Watson, Clark, Carswell, in England; in our own country, Parrish, Physic, Morton, Gerhard, Swett, and others, who have testified to cures. Yet, there is in the public mind, a deeply rooted conviction that it is incurable, and this conviction is strengthened by physicians, who are in the habit of saying there is no cure for consumption. But while this course is pursued, we advance none in the right direction, and sit down satisfied with the belief that this disease, more than all others, is beyond human control. Opposed to this view, let us briefly notice the opinions of some of the names just mentioned. Laennec who adopts the idea of the curability of consumption, after examining the lungs of many persons who had died of other diseases, says: "after I was convinced of the possibility of cure, in cases of ulceration of the lungs, I examined these remains more closely, and came to the conclusion that in every case, they might be considered cicatrices." "This fact, says he, seems to me to leave no doubt of the nature of these productions, and of the possibility of healing ulcers in the lungs." Says Dr. Forbes, Fellow of the Royal Society of England, and one of the principal editors of British and Foreign Medical Review, "For as many as eight or ten examples, of cicitrization of the lungs after tubercles, I refer the reader to M. Andral's Clinical Medicine, Book III, page 382. Dr. Stokes, of the Meath Hospital, Ireland, says: "we may consider the treatment of consumption under to heads, curative and palliative." There can be no doubt that as medicine advances, the cures of consumption will be much more frequent—its nature will be better understood. Dr. Carswell. the eminent professor of pathological Anatomy in the London University, says: "the cure of a disease is indicated first, by the cessation of those symptoms, which are peculiar to it, or the restoration of those modifications of function to which its existence gives rise. There must be few practical pathologists, he says, who will not consider the anatomical facts as evidence that tubercular consumption is a curable disease. And we can not, says he, avoid repeating the fact, that pathological anatomy has perhaps never afforded such conclusive evidence in proof of the curability of a disease as it has of tubercular consumption."

Dr. Gerhard, in his work on diseases of the chest, affirms, not only the curability of consumption, but the various appearances which are presented in the lungs when recovery has taken place. He says we have direct proofs of the curability of consumption. That evidence is derived from pathological investigation, and of this there is no more striking proof or illustration, than the case of an eminent physician of this city, the late Dr. Parrish. It is well known that he regarded himself as laboring under pulmonary consumption, at an early period of life. He finally recovered vigorous health, lived to the age sixty, and died of disease of the kidneys. Dr. Gerhard says that consumption is strictly a curable disease. Dr. Swett one of the physicians to the New Nork Hospital, in his treaties on diseases of the chest, affirms the curability of consumption. We look over this array of authority in favor of the curability of consumption, and yet, in vain do we find that the means resorted to prove successful. But here is the reason for the opinion that this scourge of the human race is curable. If consumption be curable by any process or effort of nature, even in unfavorable cases, then *it is* curable. And the members of the medical profession should learn, if they have not *already*, that *nature* is our teacher and guide, and it is the province of the true physician to minister at her altar, and to follow where she may lead. Then if nature can effect a cure of consumption when cavities have existed, there is a cure, and we should study the changes effected, the influences which may have wrought the sechanges, and profit thereby. I am willing to admit progress in the right direction, but we have not yet became sufficienty untrammelled from the shackles of authority and the teachings of schools, to read nature, and investigate her remedies. The universe of God has many remedial agents which have not been tried, and even remedies which have been used and are now covered over by the oblivion of the past, gone into disuse; among those are some of the best remedial agents of the Pharmacopœia, in many diseases. Let such be brought to light, let research and experiment test the value of our agents, not experiments in diseased action upon the human body, but let our knowledge be so perfected that human life is not the sacrifice of our efforts.

Believing that consumption is a curable disease, and that the causeses, as brought to light in these papers, are capable of being removed, we come to speak of its treatment and some of the remedial agents which have been proposed. There are three great channels through which we apply our remedies. First, the stomach, the great highway to death in this disease; the skin; and lastly through the lungs themselves. The functions of the stomach are much abused, already much weakened by the direct influence of depraved blood, yet nauseous drugs are poured into it, deranging still more its functions, till at last its operations are suspended, the wheels of life are clogged and decay goes rapidly on. In more ancient days, blood-letting was resorted to as a curative agent or means; again emetics were thought to be useful, and the various alteratives and tonics have each been recommended and each gone into disrepute. It would seem as though it was all guess work, and all doubt, as to the condition of the general *health*, and of the *lungs* in *particular*, if we but look at the *treatment* for a history. There is an impairment of the general health that remedies can not remove; why then, oppress the stomach with nauseous remedies when it is highly important that the digestive power should be sustained. Exercise in the open air with the free sunlight of heaven, and the inhalation of the oxygen of the air are natures own remedies and their influence should not be prevented by close rooms and want of good ventilation. The blood is depraved, deficient in healthy elements, and these means, to a certain extent, have the power of changing the condition of the blood, and this is an important step in the treatment. Again, the stomach should digest, and the absorbents take up the elements of nutrition, and assimilation be so perfect that the additions to the blood should be more perfect in normal elements than before; and thus is accomplished, by a simple and natural process, more than all the remedial agents in the universe have as yet accomplished.—The treatment which will prove successful, must be based upon the condition of the blood, knowing the deficient elements, and knowing them to restore them to normal proportions, thus making the blood mass as nearly normal as a deficient respiration will permit. But as this process is effected, and expansion of the lungs takes place by inhalation of the good air, the blood comes to be perfected, and then we have but the local trouble to be disposed of. The influence of blood, which in healthy elements, will arrest the morbid process in the lungs and thus become curative in its circulation. Prof. Gross says, that a poor and impoverished state of the blood is most favorable to the development of tubercle. Andral, Simon and others have analysed the blood in health and in disease In health they give us—

| | | |
|---|---|---|
| Water | 790 | grains. |
| Discs | 127 | “ |
| Albumen | 80 | “ |
| Fibrin | 3 | “ |
| | 1,000 | “ |

In anemia they give us blood changed in elements, so that in 1000 grains we have—

| | | |
|---|---|---|
| Water | 840 | grains. |
| Discs | 71 | “ |
| Albumen | 80 | “ |
| Fibrin | 9 | “ |
| | 1,000 | “ |

We have also as the analysis of tubercle, which is a deposit from the blood, by Dr Hecht of Strasburgh—

| | | |
|---|---|---|
| Albumen | 26 | grains. |
| Gelatine | 22 | “ |
| Fibrin | 34 | “ |
| Water | 30 | “ |
| | 112 | “ |

While Thenard found tubercle to consist of 98 parts in 100 of albumen. Taking it for granted that tubercles are composed of albumen principally, and that the red corpuscles are deficient, we infer a larger amount of water than is normal in healthy blood. If this be true, we, have the peculiar dyscracia of blood belonging to tuberculosis. But we have the analysis of the blood by Simon, where the water is increased, and the other elements changed from their normal proportions—

| | | |
|---|---|---|
| Water | 807 | grains. |
| Solid Res | 192 | “ |
| Fibrin | 4 | “ |
| Fat | 2 | “ |
| Albumen | 98 | “ |
| Globulin | 71 | “ |
| Hœmatin | 3 | “ |

This may be taken as an example from which there is no material deviation, except so far as the increased amount of diseases adds to the changes in the blood. This analysis is made of blood, taken in the first stage of consumption. As the disease advances to its different stages, the blood becomes more and impoverished, and this is readily understood, because digestion, absorption, assimilation are all arrested or so imperfectly performed that the blood is not benefitted by any of these means.—The question comes up, how shall we improve the blood, remove the general impairment of the fluids and solids, and thus place the system in a condition to return to health and strength? We have been aiming to accomplish this in part by the use of codliver oil, but we fail because the assimilative processes are defective, and the oil does not enter the system as a curative agent in many cases, because it fails to be appropriated.—The oil does not require digestion in the sense of other injesta, but by not tasking the stomach might be converted into fat by the assimilation, and deposited throughout the body. It is easily converted into fat, and while the deposition of fatty materials are going on in the body, we have no fears as to the result. But this is not often the case, the oil proving nauseous to the stomach and thereby preventing the beneficial influence to be desired. It must be admitted that cases have been benefitted, and some apparently cured, but we experience so many failures that we look about us for some more efficient means. My own experience teaches me that those cases which have been benefitted are the accidental cases, in which there was no original failures of the powers of nutrition. It must be admitted that where the stomach has failed entirely to digest, or change even fluid injesta, as I have often seen, it would not be likely to retain or act upon the oil in such a way as to be beneficial. In one instance the stomach failed to digest, the food taken passed by the bowels as eaten, and the patient, though not far advanced in the progress of the disease in the lungs, rapidly failed, and died from actual failure of nutrition, whereas, if he could have been sustained by any means of nourishment he must have lived much longer. In such a case the oil could not have been used with benefit, and we are left to look upon the patient passing away without a remedy to stay the progress of the disease. The oil is intensely nauseous to some persons, and sickness of the stomach is prostrating. It impairs the nervous power, already weakened and failing, hence it is useless and contra-indicated. Again, it is well known that there is deficient or arrested biliary secretion in this disease, hence the oil can not be absorbed so well, as a proper admixture of bile with any oleaginous element of food, fits it for the action of the absorbents.—There is no digestion of oils or fats, so to speak, and intimate admixture of all the fluids of the digestive organs, which favors a minute division of the oily particles, favorable for lacteal absorption. From observation, this, very ofter, does not take place in those cases where failure of nutrition is the first and most prominent lesion, hence the oil fails of its desired effect. In consumption, the principal agents or elements of food are to be drawn from the saccharine and oleaginous group, because either are convertible into fat, and those of the saccharine group are useful in the process of combustion and the generation of animal heat, which is an important item in the consumptive person, who is always chilly, except in heated rooms, the very place of all others, perhaps, in which he ought not to be found, and which are decidedly prejudicial to his present and future progress towards health. There are other modes of treatment which have the prestige of great names, and which are held up to the people and the profession as *the* modes which are to be successful. But alas, they can hardly show a case of tubercular consumption (purely so) cured. The injection of nitrate of silver into the cavities of the lungs and the cure of bronchitis and laryngitis by the same means. Laryngitis may be cured, but the passage of a sponge probang below the rima-glottidis, is in my opinion an impossibillity, and even were it possible, highly dangerous and hazardous to the patient, and the effort to effect it evincing great temerity upon the part of the physician. Again, it is possible that an expert operator may introduce a curved instrument, in the shape of a catheter, through the larynx, pass the rima of the glottis, and thus enter the trachea, but after reaching the trachea, the instrument must pass some distance to the division of the bronchia, and then to reach a cavity, must diverge and pass still farther. This requires time, and is a dangerous experiment for one suffering with cavities in the lungs, as has been proved in the death of some of the subjects of this operation.— Again, the lungs were not made to be thus invaded by foreign bodies, air being the proper and only thing intended to enter them and reach the most minute divisions of the bronchial tubes, and each minute air-cell which they contain. There is a proper adaptation and combination of the elements of the air to meet all the conditions and necessities of the animal economy, and the lungs are so constructed and arranged that air is the only thing which does not give rise to irritation when received into the lungs, hence; the introduction of a foreign body, or an effort to do so, below the vocal chords, with the view of removing diseased conditions of the structure of the lungs, I regard as opposed to sound pathology, and in direct opposition to the natural law of respiration, the function of the lungs as dependent upon air, and the resistance expressed when a foreign body has accidentally been found in the air-passages. Also, that there is no satisfactory evidence that cavities have ever been injected, and of course, none of their cure by this process. Hence, I regard this plan of treatment as futile in the treatment of tubercular consumption with cavities. There is too much, and has been, heretofore, too much of a blind adherence to the theories and doctrines of men in high places, men who should be the exponents of truth in their teachings, rather than mounting some hobby to mislead the younger and more timid of the profession. Humanity demands at our hands the advancement of truth and the eradication of error, and we should not hold him guiltless who by virtue of position, should teach error instead of truth. In speaking of the modes of treatment, I refer to some which now occupy some considerable space in the public mind, and I might say that some degree of confidence has been reposed in them. The doctrine of inhalation is one of those, and though at first my mind was somewhat favorably impressed with the specious plausibility of the teachings of one who is regarded as the exponent of this doctrine, yet after more than two years careful investigation of the subject, I regard it as an empty bubble, which will glitter for a while upon the waves of time and then burst, leaving no trace of its existence, save the vacant place, once occupied by those who have gone to their eternal homes, the victims of disease and hope deferred, under this treatment. The doctrine of inhalation is not new, it was proposed in the time of Hippocrates, 400 years before the Christian Era. Yet, it has been taught as a new fact, a brilliant discovery of these later days, by men who excel in wisdom above that which is written. The cause of tubercle is said to be, by the exponents of inhalation, "a deficient supply of air to the lungs." It is admitted upon all hands that this is an important influence, but we regard it as an error to say that this is the only cause. If this were true, all that would be necessary, would be to supply the proper amount of air, of a proper quality, to effect a cure in most cases. Not so. The fact that consumption grows out of indigestion frequently, when the lungs have never been impaired, shows conclusively that a morbid assimilation of food is a cause of consumption. An objector may say that there was imperfect respiration during the time. Not so. The broad chested, herculean frame of the blacksmith, the farmer, are the victims of this form of disease, while exercising in the open air and at the anvil. They have impaired digestion and assimilation, and the blood contains the elements of tubercle, which the respiration of healthy lungs can not burn off or remove. There are hereditary influences, also, at work, which are productive of this disease. Impure air, morbid assimilation, take their rank as alternate causes, sometimes the one prevailing first as a cause, and sometimes the other. Also, hereditary transmission, and a host of other influences might be mentioned as causes of this disease. But the most prominent have been mentioned, and now from the causes we deduce a modus operandi in the cure. Just as we determine a cause to be most prominent, just so we regulate the mode of treatment. In proportion as a cause is active, just so must the counteracting forces be active. The basis of treatment in inhalation, is that the remedies are applied to the diseased surface. But we are told that this disease is both a constitutional and a local disease. The constitutional disease is one of the blood-mass, and the local disease, the result of this disease of the blood. Then the first indication is to purify the blood and admit pure air. But inhalation says it purifies the blood and removes the local disease at one and the same time. But it proves too much. The want of pure air is, according to inhalation, *the* cause. But now, instead of introducing air pure and unadulterated, it is mixed with various medicinal vapors, inhaled, and thus, forsooth, the blood-mass is to be purified. Alas, for human wisdom. Air is the only agent which purifies the blood, when introduced into the lungs—all else besides deteriorates and impairs. Then we come to this conclusion, that there is an error in the doctrine, and for proof let us look at its results as at present it is applied. There is no institution in the country, hospital, or anything which deserves the name, in which this treatment is solely tried and tested, and in the absence of such institutions, we have to rely upon individual experience without any arranged statistical facts. We are told in the journals of the day it is eminently successful. What are the facts? Men for pecuniary gain have become their own editors, and puff their own cases, and themselves in particular, giving names and cases which have no existence in fact, and which are said to have been cured by this plan, thus inducing many poor sufferers to risk their all under the dulusive hope of being cured. The remedies are classified under five heads; expectorant, anodyne, astringents, antispasmodic, alterative, &c. These remedies are calculated to act as palliatives, quieting the patient, soothing irritation, cough, and thus the patient is still hoping, with hope deferred; and there are no cures well attested as tubercular consumption, with cavities in the lungs, where the cure can be confidently attributed to the use of these remedies.—"Alterative inhalations are said to be of chief importance in the treatment of consumption, 'properly administered and combined, these several remedies constitute a treatment which strikes at the root of the monstrous error which for centuries has held the reason of mankind in blind submission to custom and authority.'" This is the language of inhalation, by exponents. I would for the sake of humanity it were so. To sum, up then, in a few words—it is palliating—it is not curative;

because it begins wrong, and [illegible]es the first essential doctrine of its theory. It does not purify the blood, it does not furnish pure air to the lungs, and in these conditions are bound up the results of treatment. It then should, so far as truth is concerned, be submitted to trial in hospital practice, and the facts should be arranged as statistics, and if truth is in it, let the world receive it, and if errror reject it.

But now I propose briefly, a few remarks in reference to the treatment of consumption, as deduced from the pathological conditions which are advanced in the previous papers upon this subject.* I regard consumption as both a constitutional and local disease, the local disease being the result of the constitutional. Then the mode of cure is to arrest the general disease by removing the causes. Impairment of the blood is the chief condition which gives rise to manifestation of symptoms and the means which restore it to a normal condition, and the system to such a condition as shall manufacture good blood, are the curative means. Fresh air, exercise, and good digestion and assimilation are among the important means.—Drugging the stomach will never do this—an organ already frequently impaired by excesses of various kinds. Then why derange it still more. There may be times when a tonic will do much good if wisely selected, but the indiscriminate medication in this disease is an evil to be greatly deplored. In impairment of the stomach, pepsin may be introduced with the view of assisting digestion, as this article posseses the power in combination with the acids of the gastric juice, of dissolving articles at a proper temperature out of the stomach. The experiments of Wasman † upon this subject, are to the point. Next, the introduction of such food as can be easily digested and assimilated, and which contains the elements of repair in their best combination to suit the condition of the functions of absorption and assimilation. By this means we change the blood-mass, and oxygenation is perfecting the great work of the pefect assimilation of the chyle into blood. But again, if we fail because of the structural change in the lungs, or because digestion and assimilation are not performed, we can do more. I now propose *transfusion of blood* as affording a means of changing the blood-mass, thereby changing the conditions of the system, reïnvigorating the brain, and sending out increased nervous energy, and promoting digestion and assimilation and thereby placing the system in a condition to return to health and vigor. If we thus change the blood mass, tubercle ceases to be deposited. When it ceases to be deposited, the great work of cure is partly accomplished, and then the removal of those already deposited, or rendering them inactive and latent, or producing absorption, completes the cure. If cavities have been formed, by supporting the general health in this way, these cavities will soon cicatrize, and a cure is the result. It is well known that tubercular depositions take place by successive crops, and softening in the same way, hence, arrest the deposit by changing the blood, and if softening of the first crop takes place, that is the end of it, no more to soften. And how many pass through several periods of softening, with the increasing irritation still added till worn out, by the continual destructive change, which thus takes place in the lungs. I do not know that transfusion of the blood in consumption was ever thought of or recommended in the treatment of this disease, but I arrive at it from the pathology, which I regard as true, and it recommeds itself because it is the *thing* the diseased system can not do for itself, change its own blood, or manufacture it anew, because of the failure of the blood manufacturing powers of the economy. Iron is one of the elements of healthy blood, and this is deficient in all those cases, and which in transfusion is directly furnished in its proper relations, and can be thus appropriated to its proper use in the economy. So it is with the other elements thus furnished, and we have the very thing at once effected, which has so long failed to be done in any other way. Transfusion is successful in cases of hemorrhage, where the system is exhausted and anæmiated, and why not be successful in other cases where the blood is diseased, and the cause of the *local disease*. Some would object to this, because the patient should not be subjected to such a process. The irritation is small compared with the irritation often kept up with drugs, from day to day, without any corresponding benefit. This plan or mode of treatment must give strength because from the blood are deposited all the tissues, and all the secretions are from the blood, and if this be a pure article, then must all the results flowing from it be good, "for it is written, 'the blood thereof is the life thereof.'" Again, show me a patient whose system manufactures good blood, even if the lungs are diseased, and I will show you one who is not very likely to die of consumption. When the function of the lungs are interfered with, I know very well that the blood is not well äerated, and there is a tendency to deterioration of the blood, and if there is no effort at expansion, the deterioration will go on. For the mode of performing transfusion, the plan proposed by Ramsbotham, in his work on the Process of Parturition, page 333, is sufficient. The history of transfusion dates back to more ancient days, and afterwards fell into disuse, till the practice was again restored by Dr. Blundell,* in cases of dangerous and copious hemorrhage, in lying in women. The names of Hamilton, Davis, Velpeau, are referred to in reference to this subject; as also, Denman, Leacock, and Lane. That transfusion is not circumscribed in its benefits to one form of trouble is quite certain, and that it has never been before tried or suggested in any case of scrofula or consumption that I am aware of, and it has quite as much to recommend it in those cases, as in those where it has been used, I am quit certain. The experiments upon which the doctrine of transfusion is founded, were performed by Dr. Leacock, and made known in an inaugural thesis, published in Edinburg in 1817, and afterwards the experiments were repeated and varied by Blundell. The experiments prove that healthy human blood is alone fit for the purposes of transfusion, and this is of, course, eminently true in the condition of the blood which obtains in consumption. But leaving *this* for the present, we have a few suggestions to make in reference to some of the other means which may be used beneficially in the treatment of cases of consumption. In place of codliver oil, I find that rich cream or very rich milk answers a much better purpose, from the fact that it does not nauseate the stomach, and contains the oil or fatty elements which are easily and beneficially appropriated to the uses of the system, without impairing digestion and assimilation. As a tonic, some preparation containing iron is evidently best suited to most cases of tubercular disease, and frequently improves the appetite and digestive power. I am treating a case at the present time, in which the Syrup Iod. Ferri. is most strikingly beneficial, a few does of which, in this case, improves the appetite when almost entirely deficient, and beef will be craved and apparently well digested. This preparation of iron, in another case of a child, where both scrofula, as manifested in glandular enlargements, and also a diseased condition of the lungs existed, acted like a charm in removing the morbid conditions present. Exercise in the open air every day, and rich diet, as cream, butter and the gravy of beef and pork was allowed ad libitum, and at the present time the child is fat and hearty, cough gone, emaciation gone, glandular enlargements gone, and the child bids fair for long life, as any child of its age. Of the various complications of consumption I have not spoken, and of some of the forms of disease which often precede it and lead to its development, when not arrested by treatment. These subjects are not spoken of in the previous papers of which this is a part and the conclusion. Of these I may treat hereafter, and of the modes of the treatment which may successfully counteract and cure after development of the disease. I shall not continue at present, any views upon this subject, but ask for that part of treatment by transfusion in tubercular diseases, a candid investigation of medical men, and for the pathology upon which it is based, refer them to the November and January Numbers of the Medical Independent, Detroit. There are corresponding evidences of the value of a similar treatment by the use of the blood of animals in the treatment of tubercular hemorrhage, of the same in the exhaustive diseases of children, where it has been given as an internal remedial agent, subject to the process of assimilation. The authority in these cases are sufficient, and the evidence of benefit and cure well authenticated by the medical journals of foreign publications.—*Cincinnati Lancet & Observer.*

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* (Nashville Journal.) (Medical Independent.)

† Carpenters Physiology.

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*(Physiological and Pathological Research, 1824.)

### *On the Treatment of Cholera Infantum.* By ROBERT A. GHOLSON, M. D. of Petersburg, Va.

#### *Therapeutic Treatment.*

I shall first consider the treatment proper in the ordinary mild form of the disease, and afterwards that which may be necessary in its graver, more irregular and complicated types.

In the simple, mild form of cholera infantum, as it generally presents itself, we have the follicular affection as the chief, if not the only pathological element, manifesting itself usually in excessive secretion, leading to increased peristaltic action, vomiting, and purging, without much febrile disturbance of the system. There are two extremes, which the practical physicians should avoid, in his views of the nature and treatment of this profuse follicular secretion. One is the hypothesis, which views this secretion in the light of an effort on the part of nature to deplete and relieve an engorged and inflamed organ, and therefore salutary. The other is the opposite error, which regards this morbid excessive secretion as the disease itself, against which our remedies should be principally if not exclusively directed. There can be but little doubt, I think, that this excessive secretion is connected more with a relaxed than an inflamed condition of the follicles, and is often a positive evil in itself, tending not only to prostrate the forces of the general system, but to irritate and inflame the digestive mucous membrane, and aggravate the morbid condition of the follicles, upon which it depends. But there can be as little doubt, on the other hand, that this profuse secretion is but a *symptom* of the disease—a symptom, too, which is not *always* present, and that when it is observed, we may often arrest it without curing the disease. The principle indication in the treatment of this follicular affection would therefore seem to be to alter or subvert the morbid condition of the follicles, upon which the secretion depends, and at the same time to arrest, or at least restrain, within safe and reasonable bounds, the secretion itself.

I will here remark, "in limine," that in our treatment of the follicular disease, we should ever bear in mind the sympathetic disturbance in the functions of the great emunctories—the skin, the liver and the kidneys—and that as long as this disturbance remains, it will be very difficult permanently to relieve the follicular disease; and that when we do, it is often replaced by a disease of some other organ, far more formidable. While we endeavor, therefore, to arrest the follicular affection, and the copious discharges from the stomach and bowels, we must be careful at the same time to re-establish the healthy functions of these organs.—This caution will be especially necessary after the disease has continued some time, and the system has been accustomed to a flux or drain from the digestive mucous membrane. Here a sudden arrest of the discharges will be very apt to be followed by an inflammation or dropsy in the bowels, brain or some other part of the body, especially when there is any functional inactivity of the emunctories.

With these preliminary remarks in relation to the general principles which should guide us in the management of the disease, let us now enquire what are the remedial means which at the present day, and in the present state of our knowledge, are most reliable in controlling this follicular disease. Confining ourselves at present to a consideration of the internal remedies, there are two principal systems of treatment which at present divide the profession both in this country and Europe. One is the soothing, sedative, alterative course—the other is the perturbating, emetic and cathartic treatment. The latter treatment in this country is connected very much with that all pervading *hepatic pathology*, which even now so materially influences the treatment of nearly all our diseases. In Europe, especially in France, its advocates rely upon it not to *disgorge* or *emulge* the liver, but by its perturbating and revolutionary influences, to alter and subvert the morbid condition of the muciporous follicles.—However well it may be borne in the more temperate climate of Europe, and perhaps in the more northern portions of this country, I regard it as an unsafe and hazardous practice among us, leading *occasionally* to speedy and prompt collapse, and *very frequently* to inflammation of some portion of the digestive mucus membrane. With the exception, therefore, of a few rare cases, in which an emetic or cathartic may be necessary to clear the stomach and bowels *at once* of offensive and irritating ingesta or secretions, I think we had better dispense with this class of medicines in this form of the disease, and depend upon those of a soothing, sedative and alterative character. Of this latter class of remedies, *sugar of lead* and *calomel* stand pre-eminent. The sugar of lead especially is the great remedy in all stages of this form of the disease, where the discharges are watery and profuse, and require checking. Possessed of the singular virtue which we find in no other article of the materia, medica, of combining the properties of both a reliable sedative and astringent, it seems to be peculiarly suited to this form of cholera infantum. Improperly classed until recently among the astringents, its valuable sedative powers are just beginning to be recognized. To Dr. Condie of Philadelphia is the profession principally indebted for bringing it into use in the treatment of the *early* or *choleric* stage of this disease. My own experience with it, like that of almost every physician who has given it a trial, is so encouraging and satisfactory, that I consider it as the most valuable remedy we have in all its stages, where the discharges are profuse and watery, where there is not much inflammation on the one hand, or prostration on the other. No remedy we possess exercises such a prompt and happy control over that *extreme irritability of the stomach*, which is such an harassing and exhausting symptom in the commencement of this disease. For this purpose it should be given at first, while the stomach is thus irritable, rejecting almost every thing taken into it, in very small doses. A very eligible mode of administering it, is that recommended by Dr. Condie, in the following form: ℞ Aqua. puræ, ℥j; acet. plumbi, gr. v; acid acet. imp. m, v.; sach. puræ, ʒiij. M. One teaspoonful to be given every hour, or until the vomiting is suspended.

But sugar of lead is inferior to the *calomel*, the other great alterative in this disease, in one respect. It has no direct power over the biliary secretion, which is generally deficient or perverted in this disease.—Hence, for its well established power over the liver as well as the follicular disease, calomel should be administered alternately with the sugar of lead, in small doses, say from one-twelfth to one-sixth of a grain, and persevered in until its effects are displayed, or we are satisfied of its inutility. These are the two great internal remedies, upon which we must principally rely in this, the choleric stage of the disease. There are, however, various auxiliary remedies, which particular conditions of the stomach or general system may demand. Thus, when the discharges indicate *acidity*, we will derive considerable benefit from the administration occasionally of a few mouthfuls of cold carbonic acid water, in which a small portion of bicarb. of soda has been dissolved; or if this is not convenient, of gum arabic and lime water. opposite *alkaline* condition of the stomach some *acid* will be required. In such cases *strong lemonade* was a favorite remedy with Professor Chapman. Where there is a tendency to *collapse*, we must resort to some stimulant, as the chamhor julep, mint julep, Hoffman's anodyne, paregoric &c. But the irritatability of the stomach is often so extreme, that along with thes remedies to be administered per orem, we must use others, addressed to the skin and rectum. The *tepid* or *warm bath* will generally exercise a happy influence in restoring the equilibrium of the circulation, and allaying nervous irritability, and for this purpose should be used from time to time through the whole course of the disease. A mustard plaster or mustard poultice should also be applied to the stomach, while the extremities may be bathed in a mustard bath, and the spine rubbed with some stimulating liniment. If, notwithstanding the use of these means, the irritability of the stomach persists, we had better resort at once to an *anodyne enema*, consisting of three drops of laudanum (for a child one year old,) mixed with a few teaspoonfuls of some mucilaginous fluid. This rarely fails in checking the vomiting, quieting the irritabilty of the system, and securing a refreshing interval of sleep or repose, and may be repeated "pro re nata."

Under the prompt and judicious use of the above means, the choleric stage usually passes off in the course of a few days, when the disease presents itself in the form of diarrhœa. The subsequent treatment in this, the diarrhœal stage of the disease, will of course depend upon the character of the discharges and condition of the general system. If the sugar of lead and calomel have acted happily in regulating the secretions from the muciparous follicles and liver, and little else is left but an undue peristaltic action of the bowels, nothing will be required to complete the recovery but a well regulated diet, the tepid bath, and perhaps some cordial laxative, combined with or followed by an anodyne; and for this purpose, nothing answers better than the spiced syrup of rhubarb and paregoric, or if we are afraid of any preparation of opium, the hyoscyamus which is a remedy of inestimable value in the affections of children. A few drops of the paregoric or the henbane tincture may be combined with a half teaspoonful of the spiced rhubarb, and repeated from time to time as may be necessary. When we have reason to suppose that the morbid secretion or ingesta unduly are retained in the bowels, we may render the rhubarb a little more laxative by the addition of a little calomel or magnesia. When the discharges present a greenish aspect, resembling often chopped spinnage, indicating probably an excess of acid, some *antacid*, as the bicarb of soda, or magnesia, or prepared chalk, should form one of the ingredients of our prescriptions. Where the discharges are *clay-colored* or *whitish*, showing a deficiency of bile, we must continue the use of some preparation of mercury, as the calomel, or the blue powder, the hydrarg. c. creta; and where they continue watery and profuse, as in the choleric stage, there is no remedy so reliable as the sugar of lead. The stomach being retentive, the calomel and sugar of lead may now be given in larger doses, and if necessary, in combination, say from a half to one grain of the acetate, with one-eighth to one-fourth of a grain of calomel, mixed in a little spiced syrup of rhubarb. A few drops of paregoric or tinct. of hyoscyamus may, when necessary, be added to this mixture. A favorite prescription with Dr. Condie in such cases is the following: ℞ Calomel, grs. iij; cret. prepar. grs. xxxvj; acet. plumbi, grs. xij; ipp. pulv. grs. iij. F. Ch. No. 12. One of these powders to be given every three hours.

There are very few cases of this *mild form* of the disease, which will not yield in the course of a few days to the above remedies. Should they fail, however, after being given a fair trial, we must then resort at once to the class of *astringents*, and not suffer the disease to degenerate in the chronic form. We had better commence with the *tannic acid*, as it is the purest and nicest of all the astringents, free from all stimulating or tonic properties and generally well borne by the stomach. If the alterative, sedative powers of sugar of lead are still needed, the two remedies may be combined as in the following mixture: ℞. Acet. plumbi, acid tannic, aa. gr, iv; tinct. opii. camph.; sy zingiber, aa. ʒi; aquæ distillatæ, ʒvi. M. One teaspoonful every four hours.

In the more *advanced* stages, however, where the system begins to require support, we must select some other astringent, possessing *tonic* properties, as logwood, rhatany, catechu, &c. I have derived much benefit in such cases from mixtures like the following: ℞. Ext. hematoxy, ʒi; tinct. krameriæ, ʒii; sy. acaciæ, ʒii; aq. cinam. ʒviii. M. One teaspoonful every three or four hours.

If necessary, a little laudanum, paregoric or tinct of hyoscyamus may be added to each dose of the above mixture.. At this stage of the disease, where it threatens to become chronic, especially if attended with much emaciation and debility, we must be very cautious in the farther use of *mercury*. No practice is more reprehensible than the indiscriminate and continued use of this powerful antiphlogistic in all stages of this disease. It often lays the foundation of a state of hopeless cachexia, from which no subsequent course of treatment, however judicious and persevering, is effectual in rescuing its victims. In the latter or *subacute* stages of the disease, we may often reap much benefit from various alterative, astringent and tonic remedies, which will be more particularly referred to, under the chronic form of the disease. It often happens that however well a particular preparation may answer our purpose at first, the system soon loses its susceptibility to its influence, and it becomes necessary to change it for some other. The above remedies, however, are those which I have usually found most effectual in the management of the ordinary mild form of this disease.

But cholera infantum does not always present itself in the *mild form*, we have been thus far considering. The simple follicular affection is often complicated both in the choleric and diarrhœal stage, with other pathological conditions, which demand corresponding modifications of treatment.

*Inflammation* of some portion of the digestive mucous membrane is liable to supervene at any time in this disease, but especially in the diarrhœal stage, in the form of *entero-colitis*, decided *dysenteric* symptoms setting in, often in the course of a day or so, and rapidly resulting in a tender and swollen abdomen, a predominance of mucus or blood in the discharges, attended with more or less tormina and tenesmus, and continued symptomatic fever Such symptoms should be promptly met, whenever they present themselves, with the great antiphlogistics—*blood-letting*, *mercury*, *cold water*, *revulsives*, *&c.*, which should be used with a vigor commensurate with the grade of the inflammation, stage of the disease and resources of the system. *Leeches* should be applied to the epigastric or iliac region, or around the anus, as the symptoms may indicate, followed by emollient poultices, and subsequently warm anodyne fomentations, rubefacients and blisters. At the same time, *calomel*, either alone or combined with ipecac., hyoscyamus or opium, as the symptoms may indicate, should be given a fair trial. In many such cases, however, when the inflammation is confined chiefly to the lower bowels, in the form of *dysentery*, with more or less tormina and tenesmus, we will reap more benefit from *oleaginous mixtures*, containing more or less laudanum. When the discharges are of that greenish character, which indicates acidity, we will probably derive more benefit from about half a teaspoonful of spiced syrup or rhubarb, with a few grains of carbonate of soda or magnesia, and a few drops of tincture of hyoscyamus, repeated every four hours. In all cases, however, when the tormina and tenesmus are great, we must use from time to time *anodyne enemata*. When the inflammation is higher up the canal, and is yet in the acute state, and no symptoms of prostration, *cold water enemata* will prove of valuable aid. In this inflammatory type, the child's diet should be confined chiefly to mucilaginous drinks, which should be rendered slightly alkaline by the addition of a little bicarbonate of soda or lime water. *Ice*, too, should be given it to suck, confined in a thin gauze bag. This inflammatory form of the disease, when the acute stage begins to pass off, often leaves behind a subacute affection of the large intestine, confined chiefly to the rectum, attended with troublesome tormina and tenesmus. Here we must give sedative and astringent as well as anodyne injections. We should first commence with the sugar of lead, as being the most soothing and sedative of this class—next the sulphate of zinc, and then the nitrate of silver. Two or three grains of the acetate of lead or sulphate of zinc, or about half a grain of the nitrate of silver to two tablespoonfuls of mucillaginous fluid, mixed with a few drops of laudanum, will constitute an enema of suitable strength. I need not say that the return of the enema should be prevented by external pressure.

But there are other sources of danger in cholera infantum, besides inflammation of the *stomach* and *bowels*, symptoms referable to the *nervous* system or *brain*, that frequently present themselves and demand prompt attention. This is very apt to be the case when *teething* plays a predominent part in bringing on the disease. Here the disease will be ushered in with great nervous irritability and restlessness, attended with hot, swollen and inflamed gums, a flushed face, an excited eye and hot head, while the stomach and bowels may be *comparatively quiet*. In such cases, especially if attended with much vascular excitement, we must incise the gums, leech the temples or mastoid processes, apply iced cloths and bladders to the head, revulsives to the extremities, give a tepid bath, a carthartic dose of calomel, or establish revulsion in the lower bowels by a cathartic enema. In such cases, the application of *blisters* behind the ears, or to the epigastric and abdominal regions, when they are the seat of the inflammation, is a common practice, and recommended by the highest authorities. I must confess, however, that I have never been partial to the use of blisters in the diseases of infancy, and always avoid them whenever I can. I have found them more frequently *co-irritating* than *counter-irritating* agents, and believe there are but few cases, in which we cannot reap as much benefit from rubefacients as blisters. But in the aggravated cases of this disease we should leave no means untried which general experience sanctions. I need not say, however, that when deemed advisable, they should be used and watched with much caution, should never be allowed to remain longer than to redden the skin, when vesication should be completed by a soft light poultice. When there is much nervous irritability, and we fear the effects of the blister, the cerate, before being spread, should be rubbed up with a small quantity of camphor and opium, say about three grs. of camphor, to one gr. of opium, for a plaster some three or four inches square, and before it is applied to the skin, should *always* be covered with fine gauze. The neglect of this latter precaution is a dirty as well as hazardous practice, leading often to great irritation, and sometimes strangury. But while we must not hesitate to resort promptly to blood letting, mercury, cold water, cathartics and revulsives, whenever inflammation threatens to invade the brain and its membranes, we must be careful in avoiding unnecessary depletion in a disease, one of the most striking featuaes of which is *rapid emaciation and debility.* We should constantly bear in mind, too, the *anatomical peculiarities* of the infantile system, the excessive development of its spinal nervous system, and remember that very considerable disturbance in the nervous system, such as we would justly regard in the *adult* as denoting grave cerebral lession, very often occurs in the *infant* without any intra-cranial disease. Whenever, therefore, suspicious nervous symptoms present themselves in the progress of this disease, we must be very careful to interpret them correctly. My observation leads me to believe that many children in this disease are sacrificed by a depleting line of treatment, based upon a groundless apprehension of encephalic disease. A child, at any period of the disease, becomes irritable, restless and excitable—it starts and becomes alarmed from the slightest noise—anon it falls into an imperfect slumber, in which we discover some twitchings of the tendons, or even of the muscles of the face—presently it starts from its sleep in screams of terror and alarm, with perhaps some momentary flush of cheek and heat of head. We fear disease is invading the brain. We immediately order *loss of blood, cold to the head and a cathartic.* But the nervous symptoms *increase,* and the child finally goes into convulsions, and, may be, dies. Here the *tepid bath,* followed by a composing draught or anodyne enema, with cold to the head, and a dark, cool and quiet room would have restored the equilibrium of the circulation, quieted nervous irritability, and arrested at once the tendency to convulsions.

Again: in the latter stages of the disease, the child will fall into a state of *drowsiness and stupor,* in which it will make that piteous *wail* or *moan,* so sad to a mother's heart—the discharges, perhaps, have ceased, or notably diminished, and we fear that by a kind of metastasis or translation, the head has become affected. We change at once our plan of treatment—we stop the use of our astringents and tonics, and resort to calomel, cold, and it may be, leeches to the head. But the stupor increases, and passes rapidly into coma and death.

Here the explanation of these symptoms is not *inflammation of the* *brain*, but, on the contrary, debility; flagging of the dynamic nerv energies; cutting off the supply of nerve power, both to the bowels a the brain; arresting the secretions from the one, and sinking the oth in the stupor of prostration. Nothing but the prompt and timely support of the system by suitable stimulants can save the child at such a critical juncture. In all such cases, when our suspicions of encephalic disease are excited, we must examine critically into the condition of the system; the state of the circulation; the condition of the skin; the color of the face, heat of head, resources of the system, &c. The state of the mind and feelings, too, must not escape our observation. Even at the tender age of infancy, much can be learned of the state of the brain, from the display of its intellectual functions. If suspicious and ugly nervous symptoms present themselves, and we find the pulse firm, quick and excited, the skin hot and dry, the cheeks flushed, the head hot, the blood vessels about the neck, temples and fontanelle throbbing, and especially, if the child lies sad and listless, never catching its mother's eye and showing the happy and contented look of recognition, then we can hardly err in adopting a depleting line of treatment.

But of all the grave *inflammatory* forms which cholera infantum sometimes assumes, the *epidemic type* is the most malignant. This form seems to be connected with some special condition of the atmosphere, the same perhaps as in this section of country is concerned in the production of our epidemic dysentery, to which indeed it bears a striking analogy—both diseases often pervading a community at the same time—both affecting principally the large intestine, running the same rapid and fatal course and carrying terror and death into every family they visit. Its mode of access or invasion is generally sudden, unheralded often by any premonitory symptoms. A child will be suddenly seized. perhaps while asleep, with the disease; its extremities become cold; its skin pale and shriveled; it moans and gives every evidence of being unwell; soon it awakes, begins to vomit; after a while to purge more or less, reactionary fever sooner or later coming on, attended with hot skin, great thirst, epigastric and abdominal distress; these symptoms gradually ameliorating, and ending in remission much more marked and striking than we generally observe in cholera infantum, and, followed in the course of a few hours by another paroxysm, leading usually to more or less inflammation of the large intestine, evinced by mucous or bloody stools, more or less tormina and tenesmus, a tender and often a swollen abdomen, and often to great sympathetic disturbance in the brain or nervous system.

The safety of the child in such cases will often depend upon the early ination from the disease of its *malarial* or *periodical* element.—nce the *sulphate of quinine* should be administered at the *earliest possible period;* and with this view we should attack any condition of the system which may be incompatible with its use, with energy and boldness which would be rash and reprehensible under other circumstances. As soon as the paroxysm begins to moderate we should resort at once to the quinine, which should be given in an enema composed of two grs. of quinine and as many drops of laudanum, mixed in about one tablespoonful or more of any mucilaginous fluid. If the first enema should be well borne, it should be repeated every three or four hours until we think enough has been administered. While we are using the quinine, we may at the same time apply cold to the head, and poultices, rubefacients or blisters to the stomach and boweles. After divesting this form of the disease of its periodical feature, its subsequent management will not differ materially from that proper in other inflammatory forms.

Having briefly detailed the treatment which I have found most successful in the acute stages of this disease, in its diversified forms, I will now say a few words on the management of the disease when it becomes *chronic.* In the great majority of such cases, we have more or less inflammation and ulceration of the digestive mucous membrane and its follicles, seated chiefly in the large intestine, associated with much emaciation and debility. All experience teaches that chronic ulceration of the bowels is but little under the influence of medicines and requires patience and time in healing. While, therefore, we address remedies to the local affection, we must take care to husband the resources of the system until art and nature shall be able to repair the mischief done to the bowels. What shall we say here of mercury and the acetate of lead, the two principal alterative, sedative agents in the more acute stages of this disease? As observed elsewhere, the time for mercury has pretty well passed by, and nothing but the most pressing indications for its use will justify its farther employment. Much more benefit may be expected from the sugar of lead, especially in those cases in which the discharges continue frequent and watery. In all such cases we will reap much benefit from the various vegetable tonic astringents. Besides the logwood, rhatany, kino, &c. recommended in the subacute stages, in the form of chalk juleps, decoctions in either water or milk, of cranesbill, blackberry or dewberry roots, make very eligible preparations and are admirably adapted to such cases. But the class of vegetable astringents is not so well suited to those dysenteric cases, in which the discharges are mucous, gleety or purulent. Here the mineral astringents, alteratives and acids, as well as the turpentines and balsams are more appropriate. All these articles may be profitably combined occasionally with some preparation of opium or hyoscyamus. If the sugar of lead has not been used before, we should commence with that, then try, if necessary, the sulphate of zinc, sulphate of copper, alum, nitrate of silver, &c. These failing, we may resort to the nitric or nitromuriatic acids. These again failing, we may try an emulsion of oil of turpentine or balsm copaiba.—The oil of turpentine is particularly suited to those cases in which there is much flatulent distension of the bowels. When the discharges are acrid, offensive and dark colored, Condie and other authors recommend pulverized charcoal. Condie uses it in the following form: ℞ Carb. ligni. ℥i to ℥ij; pulv. rhei. ℈ij; ipec. grs. iv to xij; ext. hyos grs. xij: M. F. Ch. No. 12. One given every three or four hous. When the chronic inflammation and ulceration are confined chiefly to the lower part of the large intestine, the sedative and astringents must be administered, as advised elsewhere, per rectum, The sulphate of zinc has done more good in my hands than any other of this class. We may commence with about two grains, and gradually increase the dose. It may be dissolved in about about one or two tablespoonsful of any mucilaginous fluid, with a few drops of laudanum, administered two or three times a day.

Along with these internal remedies we must not neglect the assiduous employment of the warm bath (which may be rendered stimulating by muetard, salt, &c.), and suitable applications to the bowels, as frictions, rubefacients and blisters.

In all cases attended with much emaciation and debility and loss of appetite, we must endeavor to brace up and invigorate the system by tonics and stimulants. In the selection of a tonic or stimulants, we will of course consult the peculiar requirements of the case in hand. If there is much anemia or degradation of the constitution from the abuse of mercury of any other cause, we will select some suitable preparation of iron, as the iodide of iron or the citrate of iron and quinine, &c. The quinine or the compound tincture of bark will be especially suited to those cases connected with a malarial influence. Often the best thing we can use, where there is much emaciation and exhaustion, is a good article of old brandy. It is generally relished and well borne, and when this is the case, should always be used.

In the long, protracted, chronic cases of this disease in which the energies of the system are worn down and exhausted, as much will depend upon the general regimen as any drugs we may administer. The diet especially requires our attention. The child's life often depends upon its being kept alive for a few days or weeks, until the cool weather of autumn can come to its rescue; and it is all important that we see that it gets all the nourishment from food which its enfeebled digestion will permit. In many of these cases no arbitrary rules of diet can be laid down. Milk of any kind is often not well borne. So with the various farinaceous preparations. Animal teas, broths or juices will frequently suit better—such as a beef, veal or chicken tea, or the juice of bacon ham. Where the child is weaned, or old enough, it may be allowed to suck or eat a mouthful or so of smoked salt herring, or boiled or broiled ham. Of all the articles of diet, however, which is generally most suitable in these inveterate cases, I need not say that the sweet potato in this region of Virginia stands unrivaled. There are few children who are not fond of this delicious and valuable root, and who when suffering from the chronic forms of this disease, do not prefer it to any thing else we can give them. The opinion is pretty generally entertained among our physicians, not I think without good foundation, that besides the highly digestible and nutrient qualities of the sweet potato, it acts remedially in this disease, by its soft, emollient, shielding influence over the irritated mucus membrane. There are many cases of the disease, in which no medicine seems to do any good, and in which every thing depends upon keeping up the strength of the child until cool weather. In such cases, it is a common practice with the physicians of Southampton and other tide water counties, to dispense generally with all medicines, and put the child upon old apple brandy and sweet potatoes, and generally with the happiest result. But as before remarked, it is often impossible to say beforehand what will agree with our little patients in such cases. They often conceive a fondness for articles of diet which seems very objectionable, but which, upon trial, agree admirably. Hence we will often act wisely in consulting rather the suggestions of nature than the dictates of reason, and remember there is often much truth in the maxim, "Quod sapit, nutrit."—*Virginia Medical Journal.*

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## *Contributions to the Treatment of Croup.* By Dr Luzinsky, Director of the Children's Hospital of Mariahilf, Vienna.

Translated from Journal fur Kinder Krankheiten, by Dr. Maleech.

There are few diseases which the physician is called upon to treat that are more prevalent than angina membranosa, or which engages his attention to a greater degree; for the reason that there are few diseases more terrible and dangerous to the infantile sufferer than this—seizing the child in the bloom of health, and too often terminating rapidly its young career of life. As yet, science has done but little to ameliorate the symptoms and lessen the danger attending this formidable disease; with its earnest endeavors and the torrents of literature called forth bythe fatality of the complaint, she has, as yet, gained but a trifle, but, on the other hand, we may safely say that our confusion in regard to the treatment and pathology of this malady daily increases. A careful examination of this disease, in the forms usually presented, has led me to the belief that error in its diagnosis is not uncommon, two other forms of disease being often mistaken for that of true croup. I refer to laryngeal catarrh and laryngeal spasm, separate or combined, occurring in the same person. Strict systematizers are prone to regard these latter and somewhat related affections of the larynx, (so often running into each other) as but stages of angina membranosa, which appears to me most erroneous, and diagnosis on those premises cannot terminate other than with disadvantage in a practical point of view.

Careful search for the causes of our present confusion touching the disease in question will develope the fact that it is not the different phases which the complaint takes on that enhances our troubles, for those phases are sufficiently definite, but it lies rather with the various authors who have attempted its solution, and who have not given that due regard to its pathological anatomy which it deserves, or who do not manifest that close circumspection in their works so necessary to the clear demonstration of an abstruse subject One author teaches that croup is simply a spasmodic affection of the larynx. He will place the same title on laryngismus stridulus or asthma laryngeum; he will find in his autopsy false membrane similar to that of croup, (though not the real false membrane of this disease,) and assert, in cases where those products are met with, that it resulted from spasm alone. These are the doctrines taught by Haherkopff. Others, again, see croup in every cough, while others still, equally learned, do not attribute to these conditions the slightest importance, but wait for further symptoms to justify the diagnosis of croup.

From that inattention to pathological anatomy which is too common, we have a cause for many of the discrepancies of authors, and while they have boasted of brilliant success in the treatment of croup, they could, in truth, speak only of sorrowful results.

In the Austrian journals (Jan. 1855, p. 6-7,) I have published the results of my studies on angina membranosa, its reality, appearance and treatment, and will here quote but a small portion of that paper for the purpose of connecting my subsequent investigations:

"That angina membranosa depends upon an inflamed condition of the mucous membrane of the air passages, pathological anatomy most clearly teaches. Redness of the larynx alone is most common, th ough it often extends to the trachea and bronchia; there is also a thickened condition of the membrane, a plastic, slimy mucous, or, in its place, larger or smaller quantities of pseudomembrane. Besides these conditions, there is often found (as I have repeatedly observed) similar appearances on the gums, the inner surface of the lips on pharynx, tonsils, aœsphagus, the heart, on the stomach and intestine, in the female genital organs, and even in the bladder; they are, at times, met with on the skin behind the nose, in the axilla, and on abraded surfaces or sores. Angina membranosa is often attended with more or less croupose pneumonia. These circumstances furnish decisive proof of the existence of a peculiar crasis from whence those croupose symptoms and pseudo-membranes arise, and teach us that we cannot consider croup a local disease, but simply the local expression of a general diathesis. It is undeniable that a spasmodic condition of the larynx exists coincident with the inflammatory state of the organ; it occurs, as a sequel to the inflammatory stage, and is therefore a secondary symptom, though not the less important, for it constitutes one of the violent symptoms of the disease, and demands particular attention in treatment."

In proof of our views upon these points, above quoted, I will state that those authors who have furnished the pathological conditions present in their cases of fatal termination, have shown the trifling material changes found in the larynx are wholly insufficient to account for the violence of the symptoms during life and the ensuing death. In the *Journal fur Kinder Krankheiten,* (1856, p. 9-10,) Schlautmann endeavored to establish the doctrine that the symptoms of this disease were due to paralysis of the laryngeal muscles; but, however elegant and scientific his explanations, they are not confirmed by experience, for, on one hand the phenomena of periodicity in the supervention of the cough and dyspnœa, and on the other hand the favorable effects of opiates militate against him.

Without entering minutely into the well knwon symptomology of angina membranosa, I will speak of its prominent features: Croup is characterized by a sharply hoarse voice, and a dry, harsh cough, which is so well marked as to have obtained for it the name of "croupal sound;" it is of such peculiarity that after having heard it once it is difficult to forget. A sound most similar to this is that of the barking of a young dog. These two symptoms—hoarseness and cough—are accompanied with difficult respiration and more or less fever. These symptoms, with which croup always begins, have not as yet received their due estimation by many physicians. An otherwise highly esteemed gentlemen in science has expressed himself in the following manner: "It is a peculiarity of some children to cough from every cold, in this hoarse, barking manner." Mauthner asserts that cough, and even a simple bronchial catarrh, assumes in children with short necks, the croupy sound, and that it is met with in those cases suffering from worms. These purely theoretical assertions have not been once confirmed at our wards during fifteen years' practice on many thousands of children. They are usually unsustained in practice as they are wanting in rational physiology. I would not deny that hoarseness, cough and fever attend laryngeal catarrh. These symptoms often become troublesome, but they will usually disappear easily under simple treatment; those of croup, however, constantly advance, and are attended with dyspnœa, which is not the case with the former complaint. We can thus see why authors make so little difference between catarrhal and the true pseudo-membranous disease. Weber has ably defended this ground in the Deutschen Klinik, 1854, p. 23-4. The peculiar "croupy sound" is the first and also the most important symptom indicating the inception of the disease; it continues to its termination. When it is heard we should regard it as a warning to be mindful of danger, and if the parent and physician would bestow upon it that attention which it merits there would be but few infants comparatively, who would fall a sacrifice to the malady.

In the treatment of this disease careful attention should be given to the four following points:

*First* —To change the Crasis present.
*Second*—To prevent localization of inflammation in the larynx.
*Third*—To cut short the spasms of the larynx.
*Fourth*—To throw off the pseudo-membranes.

There are but few at the present day who will not admit that croup is dependent on a peculiar condition of the blood—a crasis whereby it becomes in itself more plastic, and exhibits a greater tendency to form false membrane on mucous surface; therefore, our first efforts should be to break in upon this morbid tendency. Such remedies, then, as induce a more fluid condition of the blood are plainly indicated. Those which have proved most useful in our wards to fulfil this indication, and at the same time unobjectionable from any peculiarity of condition induced in other parts of the system through their action, (such remedies as antimony, mercurials, sulph cupi. etc.,) are the carbonates of potassa and soda: they possess the power of dissolving albumen and fibrinous products, (recent researches in physiology have proved this fact,) and have long been used in diseased conditions of a similar nature with much advantage. I have for many years used these salts in croup with the most happy results, and in 1855, in the Austrian journals, gave publicity to the details of their action.—They received the sanction of the French, and Mareschal, in Paris, in 1856, published a memoir on their salutary effects even in the advanced stages of the disease. Jort, Valentin and Mareschal, in the *Un. Med.*, 1856-7, have confirmed the successful use of these remedies when other treatment had failed. It is proper to state that Valentin used the cautery in some of his cases at the same time that the alkaline salts were being exhibited. The dose of these remedies which I am in the habit of prescribing, is from one and a half to two drachms of either salt in twenty-four hours, according to the age of the patient; this should be dissolved in two ounces of distilled water, and after its solution add one ounce of simple syrup. The remedy is continued till the cough becomes loose, and as soon as this occurs a plastic, puss-like slime is thrown off.

[*Pacific Med & Surgical Journal.*]

# EDITORIAL AND MISCELLANEOUS.

## Close of the Volume.

With this number will close the third volume of our Journal, and we would, in this connection, suggest to our friends, that this is a most appropriate time for effort in extending our subscription list. Each subscriber could, doubtless, *add one* most readily, and if accompanied with the cash, it would, at once, enable us to furnish a Journal of much greater merit.

We know that a large number of our subscribers feel a special interest in the prosperity of the Journal, and need only to be reminded of the importance of their efforts to induce them to aid in its circulation. We shall then hope before the next number (which commences the 4th vol.) is issued, to receive a large addition to our subscription list.

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☞ We have a number of books on hand, sent for review, which it was our intention to have noticed in this number of our Journal, but have been compelled to defer it, until we shall be able to give them the attention they merit.

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## Shelby Medical College.

Since our last issue we have received the announcement of the Shelby Medical College, Nashville, Tennessee, the circular from which was noticed in the last number.

We have already expressed our good wishes for the success of this enterprize; and since we have had an opportunity of seeing the names of the entire Faculty, we have no hesitation in predicting for it in a few years, at least, an equal position with the Medical College previously established in that city. The following gentlemen compose the Faculty: Jno. Frederick May, M. D., of Washington City, D. C. Prof. of the Principles and Operations of Surgery; E. B. Haskins, M. D., of Clarksville, Tennessee, Prof. of the Theory and Practice of Medicine; John P. Ford, M. D., of Nashville, Tenn., Prof. of Obstetrics and Diseases of Women and Children; Thomas L. Maddin, M. D., of Nashville, Tenn., Prof. of Anatomy—Descriptive, Histological and Surgical; John H. Callender, M. D., of Nashville, Tenn., Prof. of Materia Medica and Therapeutics; Richard O. Currey, M. D., of Knoxville, Tenn., Prof. of Medical Chemistry and Medical Jurisprudence; Daniel F. Wright, M. D., of Memphis, Tenn., Prof. of Physiology and Pathology; R. C. K. Martin, M. D., of Nashville, Tenn., Prof. of Clinical Medicine; H. M. Compton, M. D., Demonstrator of Anatomy.

## Museum of the Atlanta Medical College.

The room appropriated to the Museum in the Atlanta Medical College having been completed, we would announce to our friends that it is now ready for the reception of whatever they may be disposed to contribute.

Through the kindness of our medical friends, in various directions, (in addition to purchases made by the Faculty,) we are now enabled to present quite an interesting and respectable nucleus, which will, we are sure, rapidly increase under the efficient management of the recently appointed Curator, Dr. N. D'Alvigny.

There are hundreds of interesting specimens in the possession of the medical men of Georgia alone, which are at present of but little comparative use, but collected in a well arranged Museum would become profitable to many. We, therefore, earnestly request medical men not only in our own State, but in others, to aid us in this way, and transmit whatever they may have, possessing the slightest interest, with its history, to the address of N. D'Alvigny, M. D., Curator, Atlanta Medical College, Atlanta, Geo.

Of course all expenses of transportation will be paid by the College. In all cases, the specimens will be labelled with the name of the donor, the history of which will be preserved in a descriptive catalogne.

## Prof. Dan'l F. Wright, M. D.

Prof. Dan'l F. Wright, M. D., the recent distinguished occupant of the Chair of Physiology, and Pathology in the Memphis Medical College, has resigned that position, and accepted the same Chair in the Shelby Medical College, at Nashville, Tennessee.

## Alcoholic Stimulants in Snake-bites.

From a letter received from Dr. John J. Addy, of Camden, Ark., we learn that upon the Western Frontier, where Rattle-Snakes are numerous, and where physicians are frequently called to treat poisonous wounds inflicted by this and other poisonous reptiles, they rely almost exclusively upon the administration of alcoholic stimulants, and in quantities sufficient to produce intoxication. It would appear from his letter, that the patient is not considered safe until drunkenness is induced—that they regard drunkenness, under such circumstances, as an evidence that the effects of the poison has been overcome by the stimulant.

Dr. Addy mentions a case that he had treated with perfect success by the free use of Whisky—the patient being perfectly relieved in twenty-four hours after the reception of the injury.

## *Proceedings of the American Medical Association.*

### Continued from June No.

Dr. Hamilton, from the committee of delegates from medical schools and colleges, to whom was referred the report of the special committee on medical colleges, reported the following preamble and resolution:

Fully appreciating the value and importance of the resolution under which they were appointed, but a majority of the gentlemen constituting this committee not being authorized by the medical faculties of the several colleges with which we are connected, to act as their representatives in this matter, and therefore regarding it quite impossible to secure a convention of delegates in the interim of the meetings of the association: therefore—

*Resoolved*, that we recommend to all the medical colleges entitled to a representation in this body, that they appoint delegates, especially instructed to represent them in a meeting to be held at Louisville, on Monday, the day immediately preceding the convention of the American Medical Association, for the year 1859, at 10 o'clock, at such place as the committee of arrangements shall designate.

The report was accepted, and the preamble and resolution were passed; after which several gentlemen claimed the floor, but the President decided that the reports of special committees were in order, the reports of committees on medical topography and epidemics having previously been referred to the committee on publication, without reading.

Dr. S. M. Bemis, of Kentucky, read an able and learned report on the "influence of marriages of consanguinity upon offspring."

Dr. John L. Atlee, from the committee appointed at the annual meeting at Richmond, in May, 1852, to procure a stone, with a suitable inscription, to be inserted in the Washington National Monument, made a final report. It stated that Mr. Haldy, a marble mason in the city of Lancaster, Pa., had in his employment a young man, Mr. J. Augustus Beck, a native of Litiz, Pa., who had given unmistakable evidence of genius as a sculptor. At the suggestion of the late lamented Dr. A. L. Pierson, of Salem, Mass., (made at the meeting in New York, just two days before his death,) the design of the celebrated painting of Girodet-Tricoson, representing Hippocrates refusing the presents of the Persian King, Artaxerxes, and his invitation to leave Greece, and reside and practice among her enemies, was selected. This was sculptured upon a block of Vermont marble, with the motto—"*Vincet Amor Patriæ*," and the stone is at the monument grounds. The entire expense was $1,000, of which one-half was paid to the young artist. The amount contributed by members individually was $501 30; the balance was voted from the treasury of the society. Accompanying the report was a letter from the Secretary of the Washington National Monument Association, and a resolution of thanks to the railroad companies, by whose liberality the stone was brought from Lancaster to Washington free of chargo. The report was accepted, and the resolution was passed.

Dr. Palmer, of Buffalo, read a report made by Dr. E. Andrews, of Chicago, Illinois, on the "functions of different portions of the cerebellum," of which the following is an abbreviated report:

The cerebellum is divided into three lobes, one median and two lateral.

The muscular system of most animals is divided into two groups, viz: those which act upon the anterior extremities and the adjacent parts of the trunk, and those which move the posterior extremities and the corresponding portion of the trunk.

The report shows that there is a direct ratio between the strength and bulk of the anterior group of muscles and the size of the median lobe of the cerebellum.

Also that the lateral lobes manifest a double ratio, their size being as the strength of the posterior group of muscles, and also the size of the hemisphere of the cerebrum.

It is inferred that the action of the cerebellum is to *excite* motion, and not merely to *co-ordinate* it; that the influence of the median lobe is chiefly expended upon the anterior group of muscles, and that the action of the lateral lobes is in some manner double, part of their influence acting upon the posterior group of muscles, and part of it having some relation to mental power, whose exact nature is not yet understood.

The facts and arguments are drawn from comparative anatomy, and illustrated with outline drawings.

Dr. Campbell, of Georgia, read a report on the "nervous concomitants of febrile diseases," which was accepted and referred to the committee of publication.

Dr. J. Marion Simms, of New York city, read an abstract of his report on the treatment of results of obstructed labor, illustrated with a series of illustrations. The Doctor seemed perfectly familiar with his subject, and was frequently applauded.

Dr. Stephenson, of New York, read an interesting abstract of his report on "the treatment best adapted to each variety of cataract, with the method of operation, place of selection, time, age, &c." Dr. Stephenson is the Surgical Director of the New York Opthalmic Hopital, an institution which relieves hundreds every year from sufferings with diseases of the eye.

On motion, other reports were called for, read by their titles, and referred to the committee of publication.

Dr. Edwards, from the committee of nomination, offered the following list of committees for the ensuing year, which was accepted, and the committees were chosen:

*Special Committee on the Microscope.*—Drs. Holsten of Ohio, Dalton of New York, Hutchinson of Indiana, Stout of California, and Ellis of Massachusetts.

*Special Committee on Medical Jurisprudence.*—Drs. Smith of New York, Hamilton of Buffalo, Crosby of New Hampshire, Purple of N. York, and Mulford of New Jersey.

*Committee on Quarantine.*—Dr.s Harris of New York, Moriarty of Massachusetts, La Roche of Pennsylvania, Wragg of South Carolina, and Fenner of New Orleans.

*Committee on Surgical Pathology.*—Dr. James R. Wood, of New York.

*Committee on Diseases and Mortality of Boarding Schools.*—Dr. C. P. Mattingly, of Kentucky.

*Committee on the various Surgical Operations for the relief of Defective Vision.*—Dr. Montrose A. Pallen, of St. Louis.

*Committee on Milk Sickness.*—Dr. Edward A. Murphy, of Indiana.

*Committee on Medical Ethics.*—Drs. John Watson of New York, Dalton of Massachusetts, Emerson of Pennsylvania, Hamilton of New York, and Gaillard of South Carolina.

Dr. Edwards also reported from the Committee of nomination the following resolution.

*Resolved,* That a committee of nine be appointed by the chair to wait on the Hon. Howell Cobb, Secretary of the Treasury, and request the restoration of Dr. M. J. Bailey, as inspector of drugs and medicines for the port of New York.

After a long disccussion the resolution, amended as follows, was then carried by a vote of 79 ayes to 55 noes.

*Resolved,* That a Committee of nine be appointed by the chair to wait on the Hon. Howell Cobb, Secretary of the Treasury, and respectfully to request the restoration of Dr. M. J. Bailey as inspector of drugs and medicines for the port of New York—at the same time disclaiming all political considerations.

Dr. Bohrer, of Georgetown, chairman of the committee on special medical essays, stated that they had not had time to read, much less to consider, the papers placed in their hands.

On motion, the committee on special medical essays was instructed to hand such papers as they deemed worthy to the committée on publication.

The President announced, as a special committee to wait on the Secretary of the Treasury, Drs. Arnold of Georgia, Atkinson of Virginia, Buckley of New York, Hayes of Pennsylvania, Smith of New Jersey, McPheeters of Missouri, Hargraves of Alabama, Pitcher of Michigan, and Hooker of New York.

On motion, Dr. Edwards was added to the committee as chairman. He declined, giving personal reasons as an excuse, but the Convention refused to receive it, and he was accordingly chosen.

A gentleman stated that he, with several friends, had voted for the resolution with the sole intention of moving its reconsideration.

Dr. Grant of New Jersey, presented a complaint made by the Newark Medical Society against the Medical College of New York, for a violation of the ethics of the profession. Dr. Edwards presented a similar complaint, and Dr. Oakley a complaint from the Union and Essex county medical societies. They were received and referred.

Dr. Sutton, of Kentucky, moved that Dr. Jarvis, of Massachusetts, have further time to report on a uniform system of registration of births, marriages and deaths, and that a committee be appointed to urge upon the census bureau of 1860 the importance of having a physician attached to it to collect vital statistics.

Dr. Kyle, of Ohio, proposed an amendment to the constitution by which no person can sit as a member or a delegate at meetings of this association who is not a graduate of a recognized medical college. Laid over for one year, under the rules.

Dr. L. A. Smith presented resolutions of the New Jersey Medical Society, praying for such changes in the constitution as would establish a board of census in every judicial circuit of the Supreme Court, who should examine and grant diplomas to all proper members of this association. Laid over for one year, under the rules.

Dr. Humphries, of Indiana presented a resolution praying for an interchange of transactions of State and County Societies; which was adopted.

Dr. Boyle, chairman of the committee of arrangements, presented the names of Professor Swallow, of Missouri, and Professor Mittag, as "members by invitation," and they were elected,

An invitation from Professor Bache to visit the Coast Survey bureaux on Capitol hill, was read, and a vote of thanks for the courtesy was passed.

Dr. Gibbs, of South Carolina, moved that Prof, Henry be requested to favor the association with his views on meteorology at such time during the session as he may select; carried unanimeusly.

Dr. Campbell, of Georgia, moved that the Secretary place on record an expression of regret with which the society has learned the death of Drs. C. R. Walton, S. W. Clanton, Marshall Hall, T. Y. Simmons, J. R. Mitchell, and other members deceased since the last annual session; carried.

On motion of Dr. Phelps, the following resolutions were passed unanimously, the members rising:

*Resolved,* That the thanks of this association are eminently due to the Regents and Professor Henry, of the Smithsonian Institution, for the ample and convenient accommodation afforded for the transaction of business·

*Resolved,* That the Committee of arrangements are entitled to our praise and highest appreciation of their exertions to promote the comfort of the members and the best interest of the association.

*Resolved,* That to the Physicians of Washington and Georgetown, and the Faculty of Georgetown College we accord the homage of our sincerest thanks for their elegant hospitalities extended to the members from abroad, by which the pleasure of their sojourn here has been so greatly enhanced.

*Resolved,* That we feel assured that the impression on the tablet of memory received here, in our national metropolis, in this the first year of the second decade of the association, will long remain an evidence of the urbane attentions received not only from the Chief Magistrate and other public functionaries of our glorious Union, but of private citizens and the community at large.

*Resolved,* That the manifestations of union of heart and purpose in the action of this session, inaugurate a new era, and call for devout acknowledgment to Divine Providence, and presage, as we trust, not only a bright future for the association, but also contributing to the perpetuity and prosperity of our great national confederation.

On motion of Dr. Anderson of New Jersey, it was unanimously resolved that the thanks of the medical association be presented to Rev. Dr. McGuire and the faculty of the College of Georgetown for their very cordial reception and entertainment of the association at the College yesterday.

On motion of Dr. Foster, of Tennessee, it was resolved that after 1860 Dr. Hamilton have the privilege of using his report on "deformities after fracture," published in the Transactions, for a work which he proposes to publish.

Dr. Duhamel, of Washington, moved that a committee be appointed to investigate and report upon the "National Hotel disease.',

Dr. Foster, of Tennessee, opposed the appointment of such a committee, as did Dr. Boyle, of Washington. Dr. Duhamel withdrew his motion.

Dr. Gaston, of South Carolina, exhibited a new uterine supporter of novel construction.

Dr. Campbell, of Georgia, was not aware, until he had just heard permission granted to Dr. Hamilton, that he had transgressed in republishing in a work a report which he had contributed to the transactions of the association. [Cries of "Regret it," "regret it."] He did regret it, and asked the sanction of the society; which was granted.

The president appointed Drs. Miller, Antisel, and Garnet a committee to wait on the census bureau, as provided by the resolution of Dr. Sutton.

Dr. Dunbar moved a reconsideration of the vote appointing a committee to request the reinstation of Dr. Bailey, and Dr. Morgan seconded it, but, as Dr. Parker had been invited upon the platform, the motion was ruled out of order.

### *Dr. Parker's Chinese Hospital.*

Dr. Peter Parker, ex-commissioner to China, was then introduced and received with applause. He exhibited some curious specimens of *calculi*, as the results of thirty-eight operations upon Chinese. They were of various shapes and composition, and weighed from a few drachms up to three, seven and eight ounces. His description of the operation by which these calculi were removed, was deeply interesting, and it was gratifying to learn that out of the thirty-eight patients all but five or six recovered perfect health.

Dr. P. proceeded to state that he has treated in China at the Hospital under his charge, fifty-three thousand cases. Pictures of the most curious cases he had brought to this country, and they were on exhibition in the room below. At no very distant period he hopes to place in a permanent form the result of his labors, with illustrations. Among other cases he had probably performed upwards of a thousand operations for cataract. On one day he operated in sixteen cases, the youngest being a mere child, and the oldest an old lady seventy-nine years of age. She came, led by a servant, submitted heroically to operations on both eyes the same day, and in a fortnight had her sight perfectly restored. In acknowledging a vote of thanks, Dr. Parker said he had among his patients all classes, from members of the imperial family down to beggars.

His greatest difficulty had been to persuade his patients that he could not cure all diseases.

Dr. Dunbar claimed the floor, and urged the reconsideration of the vote appointing a committee to wait on the Secretary of the Treasury, and solicit the reinstation of Dr. Bailey.

Dr. Paine, of Virginia, opposed the reconsideration.

Dr. Tyler advocated it, and asked if this association was formed to wait on executive officers, and to dictate to them who they shall remove and who they shall appoint. Many gentlemen around him, he was assured, had voted for the resolution without due reflection, and he trusted with confidence in their sober second thought. The press and the profession, he felt confident, would denounce this association if it entered into the wide field of politics. It was instituted to promote the great cause of science, not to join issue with government.

Dr. Morgan also advocated a reconsideration. He was not a partisan. Although he resides in Washington, he has no personal acquaintance with the President or the Secretary of the Treasury, but he was confident they would not have made the change without good reason, and it was not the mission of this association to criticise or attempt to change their views.

Dr. Palmer, after stating how little regard he had for the opinions of the press, inquired as to the present incumbent of the office. Is he capable?

Dr. Watson, of New York, said that Dr. Bailey had had his circulars out since his "rotation," and the subject had been twice before the Academy of Medicine, who have ignored it.

Dr. Burns, of Brooklyn, said that he was not a politician, and that he was a personal friend of Dr. Bailey, but he hoped that the vote would be reconsidered.

A member from California related his experience there on a question as to the superintendent of a lunatic asylum. In his opinion the less the association had to do with politics, or with expressions of opinion on political appointment, the better.

Dr. McNulty, of New York, said that the question had been twice before the New York Academy of Medicine, and twice been voted down. The present incumbent, whom it is sought to oust, is a German by birth and education. He can read the invoices in whatever European language they may be sent, and he makes his own analyses, which it is reported the ex-inspector did not do.

After some "parliamentary" skirmishing, it was decided to reconsider by a vote of 51 ayes to 32 noes. And, on motion, the subject was indefinitely postponed.

The Association then took a recess of two hours, for dinner.

### *Evening and closing Session.*

The Association was called to order at 5 o'clock P. M., by Dr. Sutton, one of the Vice Presidents, who took the chair.

The amendments to the constitution, proposed at the annual meeting in Nashville, had been made the special order. They were

1st. Amend the third article of the Constitution, in relation to meetings, by inserting after the words "first Tuesday in May," the words "or the first Tuesday in June;" and also inserting after the words "shall be determined," the words "with the time of meeting."

2d. In article 2, omit the words "medical colleges," and also the words "the faculty of every regular constituted medical college, or chartered school of medicine, shall have the privilege of sending two delegates."

Each amendment was separately discussed, and each was lost by a large vote. An amendment proposed at Philadelphia in 1856 providing for the establishment of a permanent. secretaryship was lost by a vote of 53 ayes to 84 noes.

On motion of Dr. Foster, of Tennessee, the secretary was directed to collect all the by-laws, and have them printed in the next volume.

An attempt was made to introduce a motion endorsing the accoustics and ventilation of the new Capitol extensions, but it was ridiculed by Dr. Sayre, and was withdrawn.

Various additional votes of thanks were passed, aud, at ten minutes of seven, the association adjourned *sine die.*

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*Prizes of the Mass, Med. Society.*—The Mass. Medical Society is authorized, by a donation from one of its members, to offer the sum of *one hundred dollars* for the best dissertation adjudged worthy of a prize on the following theme, viz.: "To what affections of the lungs does bronchitis give origin?" The above is open to physicians of every country. The latest article on the relations of bronchitis to other diseases of the lungs was written by Dr. W. T. Gairdner, of Edinburgh, in 1850. A review of the paper can be found in the *British and Foreign Medico-Chirurgical Review* for April, 1852. Each dissertation should be designated by a motto, and accompanied by an envelope, superscribed with the motto, and containing the writer's name and address. The sealed packet, accompanying the successful dissertation, will be broken and the author's name announced at the annual meeting of the Society in may, 1859.

Dissertations for the above prize must be sent (post paid) to the Corresponding Secretary, Dr. Benj. E. Cotting, Roxbury., Mass., on or before April 15th, 1859.

J. B. ALLEY, *Recording Secretary.*

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